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Part of the National Longitudinal Surveys which will also examine the labor market experience over a 5-year period of women aged 30-44 and young men and women 14-24 years of age, this first report analyzes a large number of economic, social, and psychological variables. It seeks to describe and explain variations in the labor market position of the males who were between the ages of 45-59 at the time of the initial interview in mid 1966. Forthcoming annual surveys of this same cohort will allow analysis of labor market experience and behavior, including mobility, over time. Data were derived from personal interviews with a multi-stage probability sample of 5,043 males in the civilian noninstitutional population. Attitudinal measures were included in the questionnaire. Some conclusions were: (1) There is hardly a dimension of labor market behavior in which black men and white men do not differ, although these differences disappear in some cases when occupation is controlled, and (2) The presence of health problems is related to low labor force participation, high unemployment, low commitment to work, high propensity to retire, low rates of pay (even within major occupation groups), and relatively more dissatisfaction with current job. Numerous tables are included. (ET)

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A longitudinal study of the labor market experience of the cohort of men 45 — 59 years of age. Vol. I.

Vol. I
October, 1968

by
Herbert S. Parnes and Others.
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and Associates

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Center for Human Resource Research.
THE OHIO STATE UNIVER~~SITY~~
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THE PRE-RETIREMENT YEARS:

A Longitudinal Study of the Labor Market Experience of the Cohort of Men 45-59 Years of Age

Vol. I

by

Herbert S. Parnes, Belton M. Fleisher,
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Associates

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Center for Human Resource Research
The Ohio State University
Columbus, Ohio
October, 1968

FOREWORD

In early 1965, the Center for Human Resource Research, under a contract with the United States Department of Labor, began the planning of longitudinal studies of the labor market experience of four subsets of the United States population: men 45-59 years of age, women 30-44 years of age, and young men and women 14-24 years of age. The present volume is the initial report on the older group of men.

Cost considerations dictated limiting the population covered; given that constraint, these four groups were selected for study because each faces special labor market problems that are challenging to policy makers. In the case of the older male group, these problems are reflected in a tendency for unemployment, when it occurs, to be of longer-than-average duration; and in the fact that average annual incomes of males decline continuously with advancing age beyond the mid-forties. In the case of the older of the two groups of women, the special problems are those associated with re-entry into the labor force on the part of a great many married women after their children no longer require their continuous presence at home. For the young men and women, of course, the problems are those revolving around the process of occupational choice and include both the preparation for work and the frequently difficult period of accomodation to the labor market when formal schooling has been completed.

While the more-or-less unique problems of each of the subject groups to some extent dictate separate orientations for the four studies, there is, nevertheless, a general conceptual framework and a general set of objectives common to all of them. Each of the four studies views the experience and behavior of individuals in the labor market as resulting from an interaction between the characteristics of the environment and a variety of demographic, economic, social, and attitudinal characteristics of the individual. Each study seeks to identify those characteristics that appear to be most important in explaining variations in several important facets of labor market experience: labor force participation, unemployment experience, and various types of labor mobility. From one point of view, the general objective of all of the studies might be defined as follows: to uncover the complex of economic, social, and psychological factors that are associated with successful adaptation by individuals to the labor market. Knowledge of this kind may be expected to make an important contribution to our understanding of the way in which labor markets operate and thus to be useful for the development and implementation of appropriate labor market policies.

For each of the four population groups described above, a national probability sample of the noninstitutionalized civilian population has been drawn by the Bureau of the Census. Members of each sample will be surveyed annually for a five-year period (for a total of six surveys per group). The present volume reports the results of the initial interview survey of the men aged 45 to 59, which was conducted in mid-1966. Initial surveys have been conducted for the other three groups, and each will be the subject of a report comparable to the present one. In addition, we contemplate reports on each of the follow-up surveys, a final report on each of the age-sex groups, and at least one major volume integrating the results of all of the studies. At the conclusion of the total project there will have been collected the most detailed and comprehensive set of work history and attitudinal data that has ever been accumulated for national samples of individuals.

Both the overall study and the present report are the product of the joint effort of a great many persons, not all of whom are even known to us. The research staff of the Center has enjoyed the continuous expert and friendly collaboration of personnel of the Bureau of the Census, which, under a separate contract with the Department of Labor, is responsible for developing the samples, conducting all of the interviews, processing the data, and preparing the tabulations we have requested. This division of function between the Census Bureau and our research staff has obviously necessitated very close liaison, and it is hardly an exaggeration to report that the relationship between us has been more nearly like that between different sections of the same organization than that between two quite different organizations separated physically by about 400 miles. We are particularly indebted to Robert Pearl and Daniel Levine who have, in turn, served as Chief of the Demographic Surveys Division; to George Hall, Assistant Chief of the Division, who has worked with us continuously from the very inception of the project; and to Marie Argana, Richard Dodge, and Marvin Thompson, who either currently or at some time during the past two years have been intimately involved in and have made substantial contributions to the project. We wish also to acknowledge our indebtedness to Rex Pullin and his staff of the Field Division, who were responsible for the collection of the data; to the late Lillian Hoffman and her staff of the Systems Division for editing and coding the interview schedules; and to Catherine Neafsey and her staff for the computer work.

The advice and counsel of many persons in the Department of Labor have been very helpful to us both in designing the study and in interpreting its findings. Without in any way implicating them in whatever deficiencies may exist in this report, we wish to acknowledge especially the valuable help provided by Stuart Garfinkle and Jacob Shiffman, who, as our principal contacts in the Office of Manpower Research, have worked closely with us from the outset and have made numerous suggestions for improving a preliminary version of this report.

It is very difficult indeed for the authors to isolate the specific contributions to this report of the other individual members of the Center's staff. Ronald Schmidt, the most senior research assistant, has played a very special role, the nature of which is perhaps best indicated by the fact that he has served as Acting Project Director during periods of the past two summers when the principal investigators were absent. The authors have enjoyed the full-time collaboration during the past summer of an able and dedicated group of graduate students all of whom have left their imprint on the final product by participating in a workshop that critically reviewed and discussed a preliminary version of each chapter. Harold Black, Elizabeth Bradner, Karl Egge, Andrew Kohen, Terry Paul, and Ronald Schmidt were members of this group. In addition, Mrs. Bradner and Messrs. Egge, Kohen, and Schmidt made such substantial contributions to the analysis and/or writing of particular chapters that their names are included, along with the principal author, in the prefatory footnote to the relevant chapter. Mr. Kohen served as editor of the entire volume, and thus had the task of synthesizing the comments made during the review of each chapter and doing battle with each author over wording in an attempt to standardize the style and format of the report. Betsy Schmidt's role in the production of the volume almost defies description. She has served as principal liaison between the authors and the research assistants, and between the editor and the secretarial staff, with an incredible combination of graciousness, good cheer, and efficiency. Rosa Maria Cormanick, Amalia Garcia, and Beth Spangler typed the several versions of text and tables.

Inevitably in a long-term project, there are numerous persons who make substantial contributions in an early period who are no longer on the scene when the project is completed. Included in this category are Deanne Knapp, Kent Schwirian, and Thomas Ostrom who served as Research Associates; Jane Baird, Nancy Barth, Thrainn Eggertsson, Tamar Granot, George Kaitsa, Mansour Mansour, and Abigail Turner who were Research Assistants; and Carol Brainerd, Sanford Cohen, and Gertrude Bancroft McNally who consulted with the research staff on one or more occasions. To all of these, we express our thanks and the hope that they will find the product worthy of their efforts.

The Ohio State University
September, 1968

Herbert S. Parnes

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Chapter 1*

INTRODUCTION

This report is the prologue to an intensive study of the labor market experience and behavior over a five-year period of the cohort of United States males who were 45 to 59 years of age in mid 1966. The total study, based upon annual personal interviews with a national sample of this age cohort, is designed to describe and explain the labor force participation, employment status, and mobility of the group over time. The purpose of the present report is to analyze their status at the time of the initial interview in mid 1966, and to seek explanations for variations in current status on the basis of a large number of economic, social, and psychological variables. In other words, this report describes where the men in this age category are in the labor market and explains how they got there. Future reports will examine and account for the changes that occur over the five years of the study. By the end of the fifth year, the oldest members of the cohort will be 64 years of age, the eve of normal retirement.

Men between the ages of 45 and 64 constitute an intriguing group of subjects for a labor market study of this kind. For one thing, the extremely high rates of labor force participation that prevail among men 25 through 44 begin to decline during the next decade of the life cycle, and even more perceptibly between the ages of 55 and 64, prior to the precipitous decline that occurs at age 65 and during the following several years.[1] The characteristics of the men who make these early withdrawals from the labor force, and the circumstances under which and processes whereby the withdrawals occur, are important topics of investigation. Of especial interest in this connection is the fact that a widening differential in the participation rates of white and black [2] men in this age category has appeared during the past two decades. In 1948, the rates for white and black men 45-54 stood at 95.9 and 94.7 percent, respectively. By 1966, a decline of 4 percentage points in the participation rate of the blacks had occurred, while that of whites remained virtually unchanged. The reasons for these trends invite study.

---

* This chapter was written by Herbert S. Parnes.

[1] In 1966, labor force participation rates for men 25-34 and those 35-44 were 97.5 and 97.3 percent, respectively, as compared to 95.3 percent for men between 45 and 54 years of age. For men 55-64, the rate was over 10 percentage points lower (84.5). Data for 1960 show a more than 16-point drop between ages 64 and 65 (73.9 to 56.3 percent) and a further decline of about 8 points between 65 and 66 years of age.

Furthermore, even the large majority of the group who remain active members of the labor force are approaching retirement age, and are therefore likely to be giving some thought to the decisions they must ultimately make about leaving the labor force and reorganizing their life styles. It may be expected that their attitudes toward retirement are a function of their economic status and their work experience, as well as of their sociological and psychological characteristics. Since orientation toward retirement is likely to be an important explanatory variable for actual labor market behavior as normal retirement age is approached, this study investigates the development and effects of retirement attitudes.

A second important reason for studying the 45-59 year age group of male workers is that they tend to have special problems in the labor market. For example, although their unemployment rates are no higher than those of younger men, they comprise a disproportionately large share of the long-term unemployed. Although it is commonly recognized that the re-employment prospects of members of this group, once they lose their jobs, are more limited than for younger workers, little is known about why some of them are able to adapt successfully to labor market changes, while others are not. Education and skill level, of course, are known to be important factors in this context; but it is also known that not all of the poorly educated and unskilled become or remain unemployed. There is need to explore such differences in adaptation in terms of worker characteristics that have hitherto been largely ignored in large-scale samples of the national population.

---

[2] At the expense of some accuracy, we are using the term "black" throughout this report instead of the more conventional "nonwhite," because we feel that the latter term is both awkward and invidious. In official data on the United States labor force, "nonwhites" include such groups as Indians, Chinese, and Japanese as well as Negroes. However, since Negroes constitute over 90 percent of the total "nonwhite" category, their characteristics are, by and large, the characteristics of the total, and it is generally understood that data on "nonwhites" are descriptive of Negroes, but not, for example, of Chinese-Americans. Our data are classified into the two color groups in the same way as the official data, but the interpretations that would in any case be drawn are made more explicit by referring in tables, as well as in the text, to all those who are not Caucasion as "black."

I.

Research Design

This report is based on data which are derived from personal interviews with a probability sample of the civilian noninstitutional population of males in the United States who, in mid 1966, were 45 to 59 years of age. The sample was drawn by the Bureau of the Census from 235 areas of the country. These areas were the primary sampling units (PSU's) in the experimental Monthly Labor Survey that was conducted between early 1964 and late 1966 by the Bureau of the Census for the Bureau of Labor Statistics.[3] In order to provide statistically reliable estimates for black men and to permit a more confident analysis of differences in labor market experience between blacks and whites, the former were overrepresented in the sample by a three-to-one ratio. The sample consists of 5,043 individuals, of whom 3,541 are white. Sample cases are weighted to reflect the different sampling ratios for whites and blacks and to adjust the sample observations to independent estimates of the civilian noninstitutional population for June,1966 by color and by the three five-year age groups covered by the study. Both absolute figures and percentages presented in the tables of the report, therefore, relate to the total civilian noninstitutional population of males 45 to 59 years of age.[4]

As in any survey based upon a sample, the data are subject to sampling error, that is, variation attributable solely to the fact that they emerge from a sample rather than from a complete count of the population. Because the probabilities of a given individual's appearing in the sample are known, it is possible to estimate the sampling error, at least roughly. Tables showing sampling errors, together with instruction for their use, appear in Appendix C.

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[3] The Monthly Labor Survey (MLS) was designed to test a number of changes in the interview schedule for the Current Population Survey (CPS) that had been proposed as a means of refining and improving current measures of the labor force, employment, and unemployment. After two and a half years of experimentation and pretesting, the CPS schedule was amended in January, 1967, and the two samples were merged, enlarging the CPS sample to 52,500 households in 449 areas. The changes were relatively minor, leaving the basic labor force concepts largely undisturbed. (See U.S. Department of Labor, *Employment and Earnings and Monthly Report of the Labor Force*, Vol. 13, No. 8, February, 1967, pp. 4-5.)

[4] For a more detailed description of the sampling procedure, see Appendix B.

The tables in this report have a number of characteristics that deserve some comment at this point. In a study of this kind, interest generally focuses on relative rather than absolute magnitudes, e.g., the *proportions* of white men and of black men who have a given characteristic, rather than their numbers. Accordingly, data in virtually all tables are presented in terms of percentages. In all cases, however, the base of each percentage is shown, so that its statistical reliability can be estimated. A reader interested in knowing an absolute magnitude can therefore readily estimate it by multiplying the relevant percentage by its base.

In calculating percentage distributions, cases for which no information was obtained are excluded from the total. This amounts to assuming that those who did not respond to a particular question do not differ in any relevant respect from those who did, a reasonably safe assumption for most variables, especially when the number of no responses is small.[5] All percentage distributions, therefore, should add up to 100 percent; when they do not, it is because of rounding. It should be observed, however, that when *absolute* numbers do not add up to the indicated total, the difference is attributable (unless otherwise noted) to cases for which no information was obtained, as well as to rounding.

Except for unemployment rates and labor force participation rates, percentages in all tables have been rounded to the nearest whole percentage point. To record them to the nearest tenth would clutter up the tables unnecessarily and create the impression of a degree of accuracy that does not in fact exist. To be statistically significant, differences in percentages in this study generally have to be at least several percentage points; thus, there is not much purpose in expressing percentages to the nearest *tenth* of a point. We have excepted unemployment rates and labor force participation rates from this general rule since the former are so low, the latter are so high, and the base of each is so large that their standard errors are quite small; hence very small differences may be significant.

With rare exceptions, our tables involve at least three-way cross-classifications in which color is almost always one of the variables. Our purpose is generally to ascertain how an independent variable interacts with color to "explain" some aspect of labor market behavior. For example, are educational attainment and unemployment experience related in the same way for black men as for white men? Since we are much more interested in this type of question than in the relation between two variables for the total population irrespective of color, most of our tables omit the totals for blacks and whites combined. It might be mentioned that because of the overwhelming numerical importance of the whites, the distribution of the total population by any variable resembles very closely the distribution of the whites. Only in Chapter 2, where we describe certain basic demographic and economic characteristics of the entire age cohort are totals presented for the two color groups combined.

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[5] In Appendix D we present for each major variable in the study, the total number of persons in the relevant universe and the number and proportion of persons for whom no information was obtained. Nonresponse rates exceed 10 percent in only very few variables. In these cases, special analyses have been made to assess the likelihood of nonresponse bias, which, if suspected, has been taken into account in the interpretation. For example, see Chapter 6, p. 188.

Percentages are shown in all table cells no matter how small the base (and, thus, no matter how statistically unreliable the percentage may be). As a result, there are instances in which the data appear to show a relationship which almost certainly is not real.[6] In our interpretations, of course, we are mindful of sampling error and, as a rough rule of thumb we are inclined not to say anything about percentages based upon fewer than 50 *sample* cases,[7] for sampling error in such cases may be very high. For example, the standard error of a percentage in the neighborhood of 50 is about 10 percentage points when the base is 50 sample cases; for percentages near 5 or 95, the standard error is about 4 percentage points. The reader who wishes to observe the same cautions in interpreting the tables should keep in mind that the "blown up" population figure corresponding to 50 sample cases is approximately 200 thousand for whites and about 50 thousands for blacks.

As has been indicated, the survey on which the present report is based is the initial stage of a longitudinal study covering a five-year period. Five additional surveys of the same sample of men will be conducted in June of each year up through 1971. In these subsequent surveys, the first two of which have already been conducted, detailed information on current labor force and employment status and on labor market experience and income during the preceding 12 months will be obtained. Thus, at the end of the five years, a complete work history for the period will have been accumulated, along with a record of changes in such other variables as health, number of dependents, and job attitudes, which are hypothesized to influence labor market behavior.

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[6] See, for example, Table 2.13 in Chapter 2. The data there imply that black men in professional and technical jobs are as likely to have a health problem that affects the kind or amount of work they can do as are blacks employed as laborers or service workers.

[7] This is not applied as an inflexible rule. For instance, analysis of the characteristics of the unemployed would not be possible if we followed the rule slavishly, since there are not as many as 50 white men or 50 black men in the sample who were unemployed.

A longitudinal population study has two essential characteristics. First, it involves measurement or description of one or more characteristics of the *same group of individuals* at *two or more points in time*.[8] Second, it involves analysis of relationships among the characteristics of these individuals at different times or of changes in one or more of their characteristics over time.

It should be noted that whether a study is longitudinal is independent of whether data are collected periodically. Making an annual survey of a group of individuals does not in itself assure a longitudinal study; nor is such a study precluded by the fact that only a single survey is conducted. If work experience data are collected annually from a sample of individuals over a five-year period solely for the purpose of ascertaining the total amount of unemployment or the total number of job changes experienced during the period by the respondents, the study is clearly not longitudinal in terms of the definition offered above. On the other hand, if a single survey collects five-year work histories and if analysis of the data includes comparisons between the labor force status of the respondents in year *n* and their employment status in subsequent years, or between unemployment experience in year *n* and job mobility in year *n-1*, the study is longitudinal even though it does not involve repeated surveys.[9]

Although a longitudinal analysis covering a five-year period may thus be made on the basis of a single survey at the end of the period, there are three major advantages in our plan of conducting annual surveys. First, some types of variables cannot conceivably be measured retrospectively. If a characteristic that is subject to change over time can be ascertained only by an objective measurement (or subjective judgment) made by someone other than the respondent, retrospective measurement of that variable is obviously ruled out.[10] Many attitudinal measures fall into this category. Where attitudes are measured directly (e.g., "How do you feel about your job?"), it is possible, although of dubious validity, to ask the question retrospectively (e.g., "How did you feel about your job five years ago?"). But when the attitudes are measured indirectly, the test instrument *must* be administered as of the time for which the measurement is required.

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[8] Dankward Kodlin and Donovan J. Thompson, *An Appraisal of the Longitudinal Approach to Studies of Growth and Development*, (monographs of the Society for Research in Child Development, Inc., Vol. XXIII, No. 1, 1958), pp. 8, 25.

[9] For an example of a rather simple retrospective longitudinal study of unemployment, see University of Michigan Survey Research Center, *Persistent Unemployment, 1957-1961*, (Kalamazoo: The W.E. Upjohn Institute for Employment Research, 1962). The present report, based only on the initial interview survey, also involves longitudinal analysis in the same sense, since the current labor force and employment status of the respondents is analyzed in the light of their previous work experience.

A second advantage of periodic surveys is that even in the case of information that from a purely logical standpoint could be collected retrospectively, validity of the data is frequently impaired by the respondents' faulty recall. The shorter the time period covered by detailed work histories, the more accurate are the responses likely to be, since respondents are likely to forget jobs of short duration or short periods of unemployment when they are queried about work experience over a long period of time.[11] Data on annual income are another case in point. These considerations suggest that even if longitudinal analysis were not contemplated (that is, if the study proposed merely to analyze cumulative labor market experience over a five-year period) there would be distinct advantages in collecting the data annually.

Finally, annual surveys permit the study of certain methodological problems in labor market research that could not be approached by a single survey. The reliability of response to questions about work experience can be tested by asking in the final survey questions that can be checked against responses in previous surveys. As another example, the validity of hypothetical questions or of attitudinal measures as predictors of actual labor market behavior can be tested only through periodic surveys of the same individuals.

In the longitudinal analysis of our data over the five-year period, we draw a distinction between "static" and "dynamic" variables. The former are those characteristics of the respondents that remain constant throughout the five-year period. Obvious examples are color, date of birth, place of birth, occupation of father, and, with rare exceptions, educational attainment. An important group of variables in this category are all those relating to work experience prior to the initial (1966) survey. For the most part, information on the "static" variables has been obtained in the 1966 survey reported here, although we are, of course, not precluded from adding variables of this kind in subsequent interviews.

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[10] It is no accident that the most extensive experience with longitudinal studies has been in the field of health, since subjects cannot possibly be expected to be able to report, for example, what their blood pressure was five years ago.

[11] By comparing data collected in 1959 on unemployment experience during the previous 24 months with data collected in 1958 covering the previous 12 months, the University of Michigan Survey Research Center has estimated that the former understated by about 20 percent the number of families affected by unemployment during the two-year period. *op. cit.*, p. 13.

The "dynamic" variables include all those subject to change for each respondent during the course of the study. In addition to measures of current labor force and employment status, annual work experience, and income, this category includes some of the variables whose effect on labor market behavior is to be studied. Examples are marital status, health of the respondent and of his wife, number of dependents, and a set of attitudinal measures.

Reports on each of the follow-up surveys will focus primarily on changes in labor market status from 1966 as well as from the year preceding the year in question. Explanations for such changes will be sought not only in terms of the static variables, but also in terms of changes in those dynamic variables which we theoretically expect to influence behavior in the labor market. An example of the former is the hypothesis that men who regard their 1966 job as the best of their career are less likely either to change jobs or to leave the labor force than those with less favorable attitudes. An example of the latter is that changes in number of dependents are positively associated with changes in hours worked during the year.

II.

Conceptual Framework

The most general statement that can be made about the determinants of an individual's activity in the labor market is that it reflects an interaction between the characteristics of the individual and those of his environment. Consider, for example, the question of unemployment. The length of time a person remains unemployed after losing a job depends in part upon a bundle of characteristics that determine his attractiveness to potential employers; e.g., education and skills, health and physical fitness, color, initiative, appearance, and age. Some of these may be functionally relevant to job performance; others may reflect employers' hiring preferences that have little or nothing to do with efficiency.

A second set of "personal" characteristics affecting employment prospects operates to determine the range of possible employers to whose attention the individual is likely to come. For example, the extent of his knowledge of alternative employment opportunities is relevant in this context, as are the vigor and initiative with which he conducts his search for work, and his willingness to broaden this search outside his area of residence and outside his regular line of work. Third, the individual's hierarchy of preferences for different types of work and different types of economic and non-economic rewards affects not only the kinds of work that he will seek, but also the range of specific jobs that he will consider.

Finally, the economic circumstances of the individual also condition the likelihood of his re-employment. The extent of his financial resources, his access to income from sources other than working, and the extent and character of his financial obligations, including the obligation to support others, all affect his "staying power," and thus, the requirements that he establishes for an acceptable job.

Yet, the experience of an individual in the labor market clearly depends upon environmental factors as well as upon his own characteristics. For any given set of personal characteristics, unemployment may be expected to be of longer duration in a depressed than in a buoyant economy. Similarly, the occupational structure of job opportunities is an important factor in explaining differentials in the incidence and duration of unemployment. Employers' personnel policies and the policies of trade unions likewise help to explain individual differences in unemployment experience. Government policies play a role, too. The availability of public training programs and their conditions of eligibility may affect not only the level of unemployment, but also the composition of the unemployed. Similarly, the eligibility provisions, benefit levels, and other characteristics of social insurance and social assistance programs may affect the unemployment experience of individuals by reducing the financial pressure to take jobs that are not regarded to be "suitable."

What has been illustrated in the preceding several paragraphs with respect to unemployment is equally applicable to all other facets of labor market behavior. Whether interest centers on labor force participation , mobility, or occupational choice, the explanation for the various patterns of behavior or experience that are observed is to be sought in the relationship between individual and environmental characteristics. The individual makes choices and acts in ways that are conditioned by the total complex of his characteristics. His behavior is also conditioned by his perception of the environment; and even if he is insensitive to or misinterprets environmental factors, they can make his choices irrelevant or, what may be even worse, "punish" him for them. The environment, in other words, plays a dual role in explaining labor market behavior: it conditions the values and perceptions of the individual and therefore the choices that he makes; and it imposes real constraints upon his action.

It is clear that there is a time dimension to both individual and environmental variables. In the case of the individual, almost every important characteristic affecting a choice or an action in the labor market is itself a product of other characteristics of the individual and of the environment at an earlier period of time. For example, a worker's skills and knowledge are a result of his past education, training, and work experience. His educational attainment, in turn, depends upon such factors as native endowment, early cultural influences, the financial resources of his parents, and the availability of educational opportunities during his youth.

The nature of the socio-economic environment at a given moment of time is also a function of its past. Even more than this, attitudes of individuals that condition their behavior may be a reflection of earlier environmental influences. It has frequently been observed that those who experienced the Great Depression of the 1930's have a different outlook toward the world of work than those who did not. This fact poses certain difficulties for the interpretation of data on labor market behavior. If it is found, for example, that men in their fifties and men in their thirties attach different relative values to wages and security in making decisions about jobs, it is not clear to what extent this reflects simply the difference in their age, and to what extent it reflects the fact that the former experienced the labor market of the 1930's while the latter did not.

The fact that the present study is limited to a fifteen-year age cohort means that the temporal dimension of the environmental influence is not so significant as it would be if we were dealing with the entire male labor force. All of the men under consideration were of draft age when the United States entered World War II. All of them at least lived through the decade of the 1930's, although the youngest were only 18 at its close. On the other hand, even within this rather restricted age group there are important differences. Men currently 55 to 59 achieved normal high-school-leaving age in the halcyon 1920's; the younger ones in the depressed 1930's.

Clearly, no single study can hope to deal with the multitude of complex variables that are implied by the foregoing paragraphs. The present study focuses largely on the supply side of the labor market and asks the question "What characteristics of individuals are important in accounting for variations in their labor market status and experience?" Environmental variables, however, are not ignored; for example, observed differences in, say, unemployment among occupational categories of workers are attributable not only to the fact that the characteristics of workers vary among occupational categories, but also to the fact that demand (environmental) conditions may be quite different from one occupational group to another. Similarly, two characteristics of the local areas included in the sample are used as independent variables whose effect on labor market experience is analyzed. These are the size of the labor force in the area and the level of unemployment.

III.

The Variables[12]

Dependent Variables

As has been indicated, our principal concern is to explain variations in (or to seek the determinants of) labor force participation, unemployment, and various types of mobility. Several measures of each of these phenomena, therefore, constitute the dependent variables of the study.

Labor force participation One of our measures of labor force participation is the conventional one based upon the individual's activity in the calendar week preceding the time of the interview.[13] The interview questions (Items 1-4) and the coding procedures used for classifying respondents are identical to those currently used in the Current Population Survey.[14] A second measure that we use is the total number of weeks in the labor force in the calendar year 1965. For each respondent, this was ascertained by adding the number of weeks that he had worked and the number of weeks that he was on layoff or looking for work during the year (Items 11-13). Although this measure has the advantage of displaying more variation than does labor force status in a single week, it is not based upon as refined a set of measurements as current labor force status. There were no careful probes to ascertain the precise activity of the individual in all weeks of the year comparable to those used for the current week. As a third measure of labor market participation we use the average number of hours worked during the weeks of 1965 in which the respondent was employed (Item 11b). Although there is some imprecision in the data obtained, this measure does provide some information about the part-time labor market participants.

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[12] The item number shown in parenthesis after each variable described in this section refers to the relevant question of the interview schedule, which is reproduced in Appendix F.

[13] For convenience, we call this week to which our measures refer the "survey week."

[14] For a detailed set of definitions, see Employment and Earnings and Monthly Report of the Labor Force, op. cit., pp. 3-13. Although the new labor force definitions had not yet been officially adopted, they were used in the present survey in anticipation of their adoption in order to insure consistency during the five years of the study and comparability with national data from the CPS.

Unemployment Employment status in the week preceding the interview is defined and measured just as it is in the CPS (Items 1-4). For respondents unemployed according to this definition, the duration of that spell of unemployment was also obtained. As in the case of labor force status, an alternative measure of unemployment is the number of weeks during the year 1965 the individual was on layoff or looking for work (Item 12-13). This measure has precisely the same advantage and disadvantage relative to the measure based on current status as have been described above for the measure of labor force participation based on a year's activity.

Mobility A variety of indicators of mobility are used in the study. Each respondent was asked to identify at least three jobs (defined as a continuous period of service with a given employer) held during his working career. In addition to the current job (or the most recent, for those currently unemployed or out of the labor force) (Item 6) these included the first job after leaving school (Item 18), and the longest job ever held (Item 17). For each of these, questions were asked which permit classification of the job according to occupation, industry, class of worker, length of service, and (except for the current job) reason for leaving. Respondents were also asked to identify the occupational assignment that they regarded as the "best" of their career (Item 19). In addition, those workers whose current (or most recent) job began in 1961 or later were asked about the immediately preceding job (Item 16).

From these work history questions, measures of interfirm, occupational, and geographic movement have been derived. Rough measures of interfirm movement, for example, are provided by the proportion of total labor force exposure accounted for by length of service in current job and the proportion accounted for by tenure in longest job. The extent and character of occupational movement are measured by comparisons of the occupational assignments in first, longest, and current jobs. Occupational shifts are analyzed not only in terms of the Census three-digit categories, but also according to direction and magnitude of change in the Duncan index of socio-economic status,[15] thus permitting the measurement of vertical mobility. Geographic movement is measured by comparing the location of first and current jobs.

All measures of mobility that have been outlined above relate to actual job shifts men have made in the past. We also use measures of mobility in the sense of propensity to move, based upon reactions to hypothetical offers of jobs. Two questions, one relating to a job within the same community and the other to a job elsewhere in the country, asked employed respondents how much they would have to be paid in order to be willing to take a job involving identical work with another employer (Item 29). By relating their responses to their current wage rates, respondents have been classified according to their relative willingness to make interfirm and geographic shifts.

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[15] See Otis Dudley Duncan, "A Socioeconomic Index for All Occupations," in Albert J. Reiss, Jr., and others, Occupations and Social Status (New York: Free Press of Glencoe, 1961), Chapter 6 and Appendix B.

Other dependent variables Although the principal dependent variables of the study are the aspects of labor market behavior that have been described above, there are portions of the analysis in which variables that are hypothesized to explain labor market behavior are treated as dependent, themselves to be explained. For example, degree of satisfaction with present job is an independent variable for purposes of explaining prospective interfirm mobility. However, in attempting to account for differences in job satisfaction, this becomes the dependent variable whose relationship with a number of explanatory factors will be explored.

Explanatory Variables

From the conceptual framework outlined earlier in this chapter, it is evident that a great many specific attributes of an individual are likely to have a bearing upon his labor market activity and experience. While we cannot, of course, claim to have included all of the relevant variables in this study, we do have a large number of important ones. Nevertheless, we are aware of limitations that exist in the measurement instruments for some of the characteristics with which we are concerned. For example, we had originally planned to include in the interview schedule a number of formal psychological and sociological tests, since much of the variation among individuals in mobility and in other facets of labor market behavior doubtless stems from differences in personality, temperament,and values that have hardly begun to be explored in labor market research. Although it was not possible to administer such scales in the initial survey, at least limited use of them will be made before the study is completed. For example, the fourth round of interviews will provide a measure of alienation based upon an abbreviated version of the Rotter Internal-External Scale.[16] In the meantime, we have relied in this report on simpler attitudinal measures with high face validity. There have been few, if any, studies involving a national sample that have combined as many attitudinal measures with as detailed work status and work experience data as are included here.

In some cases, considerations of cost or feasibility have prevented us from obtaining the kind or amount of information we should have liked.

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[16] See Julian B. Rotter, "Generalized Expectancies for Internal Versus External Control of Reinforcement," Psychological Monographs: General and Applied, Vol. 80, No. 1, 1966, pp. 1-28.

One illustration will perhaps suffice. It is obvious that the health and physical condition of an individual are powerful determinants of his labor market experience, conditioning not only his "choices" to work or not to work, how long to work, and what kinds of jobs to take, but influencing also his acceptability to employers. Our original hope was to obtain detailed and specific information on this important characteristic. In reviewing the experience in other surveys, it became apparent that to obtain confident and detailed descriptions of health status would require a series of questions at least as long as our total interview schedule could afford to be. As a result, we settled for a brief series of questions in which the respondent was asked to rate his health and physical condition and to indicate to what extent and for how long health problems imposed constraints on his activity, and to describe briefly the nature of the limitation.

In short, while we are not necessarily satisfied either with the number of variables used in the analysis or with the definition and measurement of some of them, we have included as many and have developed each as well as our ingenuity would permit, given the constraints that have been described. The principal explanatory variables are described briefly below, grouped into eight major categories.

Formative influences One would expect that what an individual becomes is influenced to a substantial degree by environmental forces operating during his youth. While there are limits to the extent that objective information on these influences can be obtained from men in their forties and fifties, there are nevertheless some major aspects of early background that can be obtained rather readily and with a high degree of confidence. Age is one of these factors. While age is an important influence on labor market activity in several respects, it is mentioned in the present context because it may be used to reflect differences in the character of the environment at major "decision" points in the individual's career (e.g., reaching working age during the Depression versus in the war-generated prosperity of the early 1940's). Nationality (Items 75, 79, 80) is used as a measure of one aspect of early cultural influences. Father's occupation when the respondent was 15 years old and father's educational attainment (Item 81) are indicators of the socio-economic status of the family when the respondent was in his early teens. Residence at age 15 (rural, urban, suburban, etc.) represents the influence of the nature and size of the community (Item 81). Family structure at age 15 (Item 81) differentiates between respondents who were reared in a "normal" situation with both parents present, and those whose early home was "broken" to some degree.

Skills Present and past occupations,[17] of course, reflect the skills and vocational knowledge that an individual has actually applied. As a more fundamental measure of potential, we use education, i.e., number of years of school completed (Item 48). For those who had as many as three years of high school, we also have ascertained type of curriculum (Item 48). In addition, for all respondents, we have information on the types and durations of any training outside of regular school (Items 49-53).

Health and physical condition As has been mentioned briefly above, two measures of physical condition and health are used. One of these is a self-rating of health, in which the respondent is asked to indicate whether his health is "excellent," "good," "fair," or "poor" in comparison with that of most men of his age (Item 45). In addition, respondents are asked whether they have any health problems or physical conditions that either prevent their working or limit the amount or kind of work they can do. If so, the nature and the duration of the limitation are described (Items 43-44).

Labor market information The extent of an individual's knowledge about the labor market may have a significant bearing on the way in which he searches for work when unemployed, the degree to which he is conscious of alternative employment opportunities while employed, and the degree of his success in the labor market, as measured either by the avoidance of unemployment or by advancement in terms of wages or occupational status. Our measure of this variable is crude, and exists only for that portion (a substantial majority) of the sample who are employed and who indicate that they would seek other work if they were to lose their jobs. On the basis of the number of specific establishments the respondents are able to mention as appropriate places for them to apply, we have coded their knowledge of alternative employment opportunities (Item 34).

Marital and familial characteristics The structure of a man's family may be expected to have a considerable influence on his labor market activity. All else being equal, a married man with young children faces greater need to work continuously than a bachelor. A man whose children are in school experiences at least one constraint upon geographic mobility that does not exist for a similar man whose children are grown. A man whose wife and adult unmarried children have full-time jobs may well react differently to the loss of his own job from the man who is the sole support of his family.

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[17] Since our sample is confined to the civilian population, all employed men have civilian occupations. Among men not currently employed, however, some 11,000 had their last jobs in the armed forces. Although included in the totals, these men are not shown as a separate occupational category in any of our tabulations.

In order to explore relationships of this kind, we use marital status of the respondent and age composition of children to describe family structure. The extent of familial obligation is also measured by number of dependents (Item 82), number of children in college (Item 86-89), and status (living or deceased) of parents and parents-in-law (Item 78). Potential and actual labor force participation by wife and children are indicated by their educational attainment (Items 86, 90, 91), their labor force activity (number of weeks worked per year, number of hours worked per week, and occupation) (Items 86, 92, 94), and the health and physical condition of the respondent's wife (Item 46).

Financial characteristics The financial situation of an individual not only reflects his entire "economic history," but also conditions his current labor market decisions. Among the more important variables of this kind whose influences are examined in this report are current wage rate (Item 8), total family income exclusive of respondent's earnings (Items 63-74), net assets (Items 55-62), and home ownership (Item 54).

Attitudinal variables As has been mentioned, the attitudinal variables included in the initial round of interviews all relate to orientation to work and job. Several questions provide a basis for measuring commitment to work. All respondents except those out of the labor force were asked whether they would continue to work if they somehow acquired enough money to allow them to live comfortably without working (Item 28). A second question in this category asked all respondents which they believed to be the "more important thing about a job: good wages or liking the work" (Item 27). A series of questions with respect to retirement plans serves as a basis for an index of "propensity to retire" for each respondent (Items 39-41). Finally, all employed respondents were asked to indicate the factors about their current jobs that they liked or disliked (Items 25-26). The responses permit us to discriminate between those who focus on "intrinsic" factors, i.e., those related to the nature of their work and those who emphasize "extrinsic" factors, i.e., aspects of satisfaction that are not inherent in the particular type of work they do.

A second attitudinal measure is the degree of satisfaction with current job. Employed respondents were asked to state whether they liked their job very much, liked it somewhat, disliked it somewhat, or disliked it very much (Item 24). Attachment to present employer is measured by the response to a question relating to a hypothetical job offer in the community (Item 29). Geographic mobility propensity is based on reactions to a similar hypothetical job outside the local labor market area (Item 29).

Environmental variables[18] The variables representing the characteristics of the local labor market in which each respondent lives have already been mentioned. Size of local labor force is the number of persons, as of 1960, in the civilian labor force of the primary sampling unit (PSU) in which the respondent lives. In all but a small number of cases, these areas are SMSA's or individual counties. Unemployment level is the unemployment rate of the area in 1960. Areas have been classified into three categories: those with low unemployment rates (less than 4.2 percent), those with moderate unemployment rates (4.2 percent to 6.2 percent), and those with high unemployment rates (6.2 percent or more). It would, of course, have been preferable to have had a measure of unemployment for 1965 or 1966, but unemployment estimates do not exist for inter-censal years for most of the areas in the sample. Use of the 1960 data assumes that the relative unemployment rates of local areas do not change substantially over short periods of time. Recent evidence suggests that this assumption is warranted.[19] For subsequent reports, we shall have average annual unemployment rates for 1967, based on the monthly CPS figures for the PSU's in our sample.

IV.

Plan of Analysis

In the following chapters, we shall attempt to explain variations in labor market behavior on the basis of the variables that have been described by simple tabular analysis. For example, a table which cross-classifies men by marital status and degree of attachment to present employer enables one to decide whether married men display higher or lower prospective mobility than those without wives.

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[18] Another environmental measure that we have developed, but not used in this report, is an index of industrial diversification of the local area. This was based upon the degree to which the composition of employment by major industry division in the area (1960 Census data) was similar to that for the total United States. It was our hypothesis that this would be related to various mobility measures. No such relationships emerged in the data, however, possibly because the industrial categories used in constructing the index were too broad.

[19] Jacob Mincer has concluded that local area unemployment rates reflect long-run structural differences among areas. He reports a correlation coefficient of +.8 between unemployment levels in 1957 and in 1964 in the 150 major labor market areas of the U.S. and almost as large a correlation between 1950 and 1960. "Labor Force Participation and Unemployment," in Robert A. Gordon and Margaret S. Gordon (eds.), Prosperity and Unemployment (New York: John Wiley and Sons, Inc., 1966), p. 80.

If it is found that married men are indeed less mobile than those without wives, can it be concluded that marital status really makes a difference with respect to mobility? A moment's reflection indicates that if married men happen to have higher wage rates than their non-married counterparts, and if there is also an inverse relationship between wage rates and mobility, the association between marital status and mobility may simply be a reflection of the influence of wage rates. That is, marital status may not exercise any independent effect on mobility. To test whether this is the case, one might have a three-way classification by marital status, wage rate, and degree of attachment. Then, if within each wage rate category married men are found to have greater attachment to their current employer, and within each marital status category men with high wage rates are found to have greater attachment, one can conclude that each of these variables has an independent effect on mobility (assuming that another common variable is not at work).

This procedure will be followed to the extent possible in the analysis. In other words, where there is reason to suppose that two explanatory variables that are associated with some aspect of labor market are themselves correlated, the relation of one of the variables will be investigated, controlling for the other in the manner illustrated above.

Nevertheless, with the large number of variables involved, it is obviously impossible to carry this process very far. Three-way, or at the most four-way cross-classifications are the limit of what is feasible, since more complex tables would not only be very cumbersome, but the small number of sample cases underlying the various entries in the table would make the sampling error so large as to prohibit any confident interpretation. Thus, in investigating the relationship between any two variables, we are limited to controlling for only one or two othersat a time. These results, however, should go far toward disclosing the most influential variables that will provide the bases for a subsequent multivariate analysis.

The following chapter contains a description of the demographic, labor force, and employment characteristics of the age cohort of males 45 to 59 based upon our sample data. Comparisons are made with similar data derived from the CPS, to test the representativeness of our sample. Chapter 3 deals with the determinants of labor force participation. Also, an analysis is made of the status, plans, and intentions of those currently out of the labor force, with the objective of ascertaining the probabilities of their re-entrance during the five years to be covered by the study.

In Chapter 4, the unemployment experience of the age cohort during the survey week and the calendar year 1965 is examined with a view to ascertaining the factors explaining the incidence of unemployment. Various aspects of mobility are the subject of Chapter 5. Specifically, the chapter addresses itself principally to the determinants of prospective interfirm and geographic mobility, and to the determinants and consequences of past movement among employers, occupations, and geographic locations. Patterns of occupational change between first and present jobs are described, and factors associated with upward, lateral, and downward movement are analyzed.

Chapter 6 deals with the retirement expectations of the surveyed men. The prevalence and incidence of compulsory retirement arrangements are described and the factors associated with different "propensities" to withdraw from the labor force are explored. In Chapter 7, the determinants and interrelationships among attitudes toward work and toward current job are analyzed. The conclusions emerging from the study are summarized in Chapter 8.

Chapter 2*

DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

In mid 1966, there were approximately 15 million males in the civilian noninstitutional population of the United States who were between 45 and 59 years of age. This chapter presents a brief description of selected demographic and economic characteristics of the age cohort as a foundation for the analysis of their labor market behavior in subsequent chapters. Attention will be focused principally on the interrelations among variables that may be presumed to be related to labor market behavior. For example, here we ask such questions as whether white men and black men differ with respect to characteristics (e.g., marital status) that may be expected to have an independent effect on labor market activity. To the extent that they do, differences in labor market behavior between the two color groups may, at least in part, simply reflect the influence of these other characteristics that are correlated with color. While the variables treated in this chapter are primarily the explanatory variables of the study, we include also a summary tabulation of labor force and employment status by color and age, largely for purposes of comparing the results of our survey with those of the Current Population Survey for the same month.

I.

Comparison of Longitudinal Survey with Current Population Survey Data

Despite several differences in survey methods and definitions, estimates of employment and unemployment based on our longitudinal survey (LGS) are quite close to the official estimates for this age group of males derived from the Current Population Survey (CPS). The labor force participation rate for all men 45-59 years of age is 93.8

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* This chapter was written by Herbert S. Parnes, Elizabeth Bradner, and Ronald M. Schmidt.

percent in both the LGS and the CPS for June, 1966. The overall unemployment rates are 1.8 percent in CPS and 1.3 percent in LGS (Table 2.1). While this difference in unemployment rate is not statistically significant, the fact that the LGS rates are consistently lower in all age and color groups suggests that the differences do not arise solely as a result of sampling variation.

There are several possible sources of difference (other than sampling variation) between the results of the two surveys. First, there is a slight difference in timing. The CPS interviews were conducted during the week of June 19, 1966, and related to labor force and employment status during the preceding calendar week. The LGS interviews, on the other hand, were conducted over a longer period -- from the last week of May through the month of June. In each case, the reference week was the calendar week preceding the date of the interview. The two studies differ also with respect to source of information about men 45-59 years of age. In the LGS, interviews were invariably with the subject himself, whereas in the CPS, information about men in the relevant age category frequently comes from some other household member, generally the wife. Finally, the series of questions on which the labor force and employment status is based were not identical in the two surveys, and the definition of unemployment was, on balance, slightly more restrictive in LGS than in CPS. Our longitudinal survey used the experimental questions and definitional standards of the Monthly Labor Survey (MLS) in anticipation of their ultimate adoption by the CPS. The CPS schedule was not thus modified until January, 1967. In other words, the questions relating to current labor force and employment status in the LGS schedule are identical to those which now appear in CPS.[1]

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[1] The chief differences were that the LGS involved a more rigorous definition of unemployment based on probes with respect to the timing and nature of the work-seeking activities of the unemployed, and probes on hours of work designed to obtain more accurate information about weekly hours of work. With respect to definitions, to be counted among the unemployed in the LGS an individual must have taken overt steps to look for work during the past four weeks and must have been available for work (except in the case of temporary illness) in the week in question. For a detailed discussion of the differences and their probable effects, see Robert L. Stein, "New Definitions for Employment and Unemployment," U. S. Department of Labor, *Employment and Earnings*, February, 1967, pp. 3-27.

Table 2.1 Comparison of LGS and CPS Labor Force Participation Rates and Unemployment Rates, by Age: Men 45-59 Years of Age, by Color

Age	Labor force participation rates		Unemployment rates	
	CPS(1)	LGS	CPS(1)	LGS
	WHITES			
45-49	96.6	96.6	1.7	1.2
50-54	94.9	95.2	1.6	1.4
55-59	90.5	90.1	1.8	1.4
	BLACKS			
45-49	92.6	93.9	2.3	2.0
50-54	88.3	90.6	4.0	2.3
55-59	86.7	85.2	3.7	2.6
	TOTAL			
45-59	93.8	93.8	1.8	1.4

(1)Data from special tabulations provided by Bureau of the Census.

It is not possible to be certain about the relative contribution of each of these factors to the differences in measured unemployment rates between the two surveys. The differences in questions and definitions would be expected to produce a lower unemployment rate in the LGS than in the CPS.[2] This same factor, however, should reduce by the same amount the LGS labor force participation rate compared with that of CPS, but this does not occur in our data. The difference between the two surveys in who typically provides the information might also lead to a lower unemployment rate in LGS than in CPS, since an individual must work only as long as an hour during a week to be classified as employed, and a wife (or other household member) is probably less likely than the subject himself to be aware and mindful of such short periods of employment. This factor would, therefore, tend to increase employment in LGS relative to CPS, but to reduce either unemployment or those out of the labor force or both. In actual fact, the differences between our data and those of CPS for June occur almost exclusively in the employment and unemployment estimates, rather than in estimates of the labor force. Whatever the sources of difference between the two surveys, the important fact is that they are small. In no case are they greater than what could be produced, within accepted probability levels, by sampling error.

II.

Demographic Characteristics

Color and Age

Of the 15,020,000 males between the ages of 45 and 59 in the civilian noninstitutional population in mid 1966, 1,405,000 or 9.4

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[2] Stein, op. cit., p. 9. Operating in the opposite direction is the effect of "rotation group bias" in the CPS. In the CPS sample, only about an eighth of the respondents each month are being interviewed for the first time, and there is evidence that responses vary among segments of the sample depending on whether they are newly entering the sample or are being re-interviewed. Specifically, unemployment rates (and also employment rates) tend to be higher among that portion of the sample being interviewed for the first time than among those being re-interviewed. See Robert Pearl and Joseph Waksberg, "Effects of Repeated Household Interviews in the Current Population Survey," paper presented before the 47th National Conference of the American Marketing Association, June 17, 1964, Dallas, Texas.

percent were black, a somewhat smaller proportion than that prevailing among males of all ages. When the total group is divided into three five-year age categories almost exactly one-third falls into the central category, a somewhat larger fraction in the youngest, and a somewhat smaller proportion in the oldest (Table 2.2). The pattern is substantially the same for whites and blacks, although the latter have a slightly smaller proportion than the former who are 55-59.

Table 2.2 Age Distribution, by Color: Men 45-59 Years of Age

(Percentage distribution)

Age	WHITES	BLACKS	TOTAL
45-49	37	37	37
50-54	34	34	34
55-59	30	28	29
Total percent	100	100	100
Total number (thousands)	13,615	1,405	15,020

Marital Status

About nine-tenths of the men in the 15-year age cohort are married (Table 2.3).[3] This fraction diminishes only slightly with increasing age, from 90 percent for the youngest group to 88 percent for the oldest. The proportion for blacks is 81 percent, lower by 9 percentage points than that for whites. The difference in marital status between whites and blacks increases with increasing age, and is exclusively attributable to the larger proportion of widowed, divorced, and separated among the blacks. For the total age cohort, this proportion is 14 percent of the blacks, but only 5 percent of the whites.

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[3] Here, and throughout the report, "married" includes "married, spouse absent" as well as "married, spouse present." It does not, however, include men who reported themselves as "separated."

Table 2.3 Selected Characteristics, by Age: Men 45-59 Years of Age, by Color

(Percentage distribution)

Characteristic	WHITES				BLACKS				TOTAL			
	45-49	50-54	55-59	Total 45-59	45-49	50-54	55-59	Total 45-59	45-49	50-54	55-59	Total 45-59
Marital status												
Married	91	90	89	90	85	80	77	81	90	89	88	89
Never married	4	4	5	5	5	4	4	4	4	4	5	5
Other	4	6	6	5	10	15	19	14	5	7	7	6
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Number of dependents (excluding wife)												
None	24	41	61	41	26	41	51	38	25	41	60	41
1-3	60	52	36	50	48	42	38	43	59	51	36	49
4 or more	16	7	3	9	26	17	11	19	17	8	4	10
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number of men in population (thousands)	4,977	4,619	4,019	13,615	525	481	399	1,405	5,502	5,100	4,418	15,020
Years of school completed												
8 or less	29	36	43	36	53	72	75	66	32	40	46	39
9-11	21	22	22	21	21	14	14	17	21	21	21	21
12	29	25	17	24	18	9	5	11	28	23	16	23
13-15	9	8	9	9	4	2	2	3	9	7	8	8
16 or more	11	10	9	10	5	2	3	3	10	9	9	9
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number of men with work experience (thousands)	4,977	4,615	4,016	13,608	522	478	399	1,400	5,499	5,094	4,415	15,008

Number of Dependents

Two-fifths of the men in the sample have no dependents other than a wife; half have one to three dependents (Table 2.3). As would be expected, older men are less likely to have dependents than younger men. Whereas only a fourth of those 45-49 years of age have no dependents other than a wife, this is true of three-fifths of the 55-59 year-old group. Blacks do not differ from whites in this respect, but they have more dependents than whites at every age level. For the total age group, men with four or more dependents comprise 19 percent of the blacks compared to 9 percent of the whites.

Dependency as a financial burden is, in most cases, at least partially offset by having a wife or child employed. In 64 percent of the cases in which a wife or child is present, one or more of these other family members is employed. Blacks and whites do not differ in this respect, but blacks are more likely than whites to have a wife employed and whites are more likely than blacks to have a child employed. This is consistent with the higher labor force participation rate of middle aged black women relative to their white counterparts, and with the higher unemployment rate and lower labor force participation rate of black than of white teenagers.

Educational Attainment

In the total age cohort, as many as two out of five men have not gone beyond primary school (Table 2.3). An equal proportion, on the other hand, have completed high school, and about one in ten has four years of college or more. Rising educational opportunities, even during the relatively brief span of years represented by this age cohort, are reflected in the differences in educational attainment between the youngest and the oldest five-year age category. The former has a substantially smaller proportion who have not gone beyond the eighth grade (32 percent versus 46 percent) and a substantially larger proportion who have completed high school (47 percent versus 33 percent).

The pronounced relative disadvantage of black men with respect to education is reflected in the fact that only 17 percent of them finished high school compared to 43 percent of the whites in the total 15-year cohort, and that only 3 percent completed college compared to 10 percent of the whites. The relative educational disadvantage of the blacks is smaller for the younger than for the older men. A rough calculation of mean years of schooling indicates that among the 55-59 year age group, blacks have less than two-thirds as much education as whites, while in the 45-49 year old group, they have slightly over three-fourths as much.

Vocational Training

Preparation for work is provided not only by the formal educational system, but by a variety of training institutions outside the regular school system. Almost half of all men 45-59 years of age have had some such training, and almost a fifth have participated in more than one program (Table 2.4). Whites are significantly more likely than blacks (by 20 percentage points) to have received training and are twice as likely to have been involved in more than one program.

Of the total number of men in our age cohort with no more than eight years of schooling, 70 percent have had no vocational training compared to 51 percent for the total group. The likelihood of a man's having vocational training rises with education up to the college drop-out years, where it reaches a high of 67 percent and then falls slightly for college graduates. Thus, the less educated are doubly disadvantaged from the standpoint of their attractiveness to potential employers by their lack of vocational training. It would seem that vocational training outside the school is more a complement to than a substitute for formal education for this male age cohort.

The most common type of training obtained by white men is for one of the skilled manual occupations (39 percent), followed by professional and technical training (24 percent) and clerical training (15 percent) (Table 2.5). These figures include training received in business colleges, technical institutes, company training schools, in the armed forces, and at other training centers. The training that black men receive is for lower occupational levels than that of the whites: 52 percent of those who were trained took skilled manual trades courses, while only 12 percent took professional or technical courses, and 8 percent took clerical courses.

As might be expected, there is a relationship between the amount of formal education a man has had and the type of vocational training he has had outside of school. Those with no more than a high school diploma who have additional training have typically been in skilled manual courses; those with college work have typically had professional or technical training. It is significant, however, that irrespective of educational level, black men with training are substantially less likely than white men to have been in professional, technical, and managerial courses.

Health and Physical Condition

Slightly over a fourth (27 percent) of the men in this age cohort report a health problem or physical condition that either limits the kind or amount of work that they can do or prevents them from working (Table 2.6). This finding is very similar to that reported in a recent

Table 2.4 Number of Programs of Vocational Training outside School, by Years of School Completed: Men 45-59 Years of Age with Work Experience, by Color

(Percentage distribution)

Number of programs	8 or less	9-11	12	13-15	16 or more	Total
	WHITES					
None	68	48	34	32	39	50
1	24	35	37	35	36	32
2 or more	8	18	29	33	24	19
Total percent	100	100	100	100	100	100
Total number (thousands)	4,840	2,897	3,262	1,182	1,352	13,608
	BLACKS					
None	81	56	34	53	45	70
1	15	32	38	23	33	21
2 or more	4	12	28	24	22	9
Total percent	100	100	100	100	100	100
Total number (thousands)	916	232	155	42	47	1,400
	TOTAL					
None	70	48	34	33	39	51
1	23	34	37	34	36	31
2 or more	7	17	29	32	24	18
Total percent	100	100	100	100	100	100
Total number (thousands)	5,755	3,129	3,417	1,224	1,399	15,008

Table 2.5 Type of Vocational Training, by Years of School Completed: Men 45-59 Years of Age with Work Experience Who Have Had Vocational Training, by Color

(Percentage distribution)

Type of training	8 or less	9-11	12	13-15	16 or more	Total
	WHITES					
Professional and technical	14	18	25	36	35	24
Managerial	2	5	7	10	10	6
Clerical	8	14	16	22	18	15
Skilled manual	56	50	36	19	12	39
Other	19	13	15	14	25	16
Total percent	100	100	100	100	100	100
Total number (thousands)	1,446	1,431	2,051	760	772	6,472
	BLACKS					
Professional and technical	7	11	18	24	18	12
Managerial	0	3	4	0	7	2
Clerical	1	7	14	25	25	8
Skilled manual	61	51	51	30	14	52
Other	31	28	14	21	36	26
Total percent	100	100	100	100	100	100
Total number (thousands)	165	93	95	19	22	395
	TOTAL					
Professional and technical	13	18	25	35	35	23
Managerial	2	5	7	9	10	6
Clerical	7	14	16	22	18	15
Skilled manual	57	50	37	19	12	40
Other	20	14	15	14	25	17
Total percent	100	100	100	100	100	100
Total number (thousands)	1,609	1,524	2,146	780	794	6,866

Table 2.6 Health Measures, by Age: **Men 45-59 Years of Age with Work Experience, by Color**

(Percentage distribution)

Health measure	WHITES				BLACKS				TOTAL			
	45-49	50-54	55-59	Total 45-59	45-49	50-54	55-59	Total 45-59	45-49	50-54	55-59	Total 45-59
Effect of health on work												
Does not **limit**	79	74	67	74	77	73	66	72	79	74	67	74
Limits **kind or amount**	20	23	27	23	20	22	25	22	20	23	27	23
Prevents	2	3	6	3	3	5	9	5	2	3	6	4
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Self-rating of health												
Excellent	40	34	32	36	36	30	30	32	39	34	31	35
Good	44	44	42	43	35	42	33	37	43	44	41	43
Fair	13	17	18	16	22	18	21	20	14	17	18	16
Poor	4	5	9	6	7	9	16	10	4	5	10	6
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number of men with work experience (thousands)	4,977	4,615	4,016	13,608	522	478	399	1,400	5,499	5,094	4,415	15,008
Duration of health problem (years)												
Less than 1	5	5	6	6	5	3	2	3	5	5	6	5
1-2	13	15	19	16	19	22	21	20	14	16	19	16
3-4	14	15	18	16	18	20	26	22	15	15	19	16
5-9	17	25	22	22	18	20	12	17	17	25	21	21
10 or more	51	40	34	41	40	35	38	38	50	39	34	41
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number of men with a health problem (thousands)	1,050	1,198	1,298	3,546	120	128	136	383	1,170	1,325	1,434	3,930

study of disability by the Social Security Administration.[4]

The frequency with which health affects work increases with age, as does the severity of its effect. The proportions with health problems are 22 percent, 26 percent, and 33 percent for men 45-49, 50-54, and 55-59 years of age, respectively. Blacks do not differ substantially from whites in the frequency with which health affects work (27 percent versus 26 percent), although the incidence of complete disability is two-thirds greater among them than among whites (5 percent versus 3 percent).[5] The greatest difference is in the oldest age category, where 9 percent of the blacks and 6 percent of the whites are prevented from working by health problems.[6]

Of all those whose health or physical condition affect their ability to work, 21 percent have had the difficulty for two years or less and a remarkably high 41 percent for ten or more years. For the total group of white men, the frequency of short-term health problems (two years or less) rises with age, whereas the frequency of long-term (ten years or more) health problems remains constant at about 11 percent of the total in each age group.

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[4] Lawrence D. Haber, "Demographic Correlates of Disability," paper presented at April, 1968 meetings of Population Association of America, Boston, Massachusetts. This study, based on a national sample, found that 23 percent of men between the ages of 45 and 54 had a disability of six months or longer duration that either limited the kind or amount of work they could do or precluded working entirely. If we consider only men 45-54 years old with health problems of greater than six months' duration, our figure becomes identical.

[5] The Social Security study previously referred to (Ibid.) also found substantially greater incidence of severe disability among blacks. However, unlike the present study, it also found greater incidence of all types of disability among black men.

[6] We are by no means confident that our measures of health are picking up all of the difference between black men and white men. There may very well be a cultural bias in responses to the health questions in the interview schedule. An individual's response to the question of whether his health or physical condition affects the amount or kind of work he can do reflects (in addition to the type of work he normally does) two quite different kinds of perceptions: (1) his perception of what constitutes good health, and (2) his perception of his own physical condition. Both of these perceptions may be influenced by cultural factors, including the amount of medical attention the individual is accustomed to receiving. For example, if white men typically receive medical care for more of their ailments than black men, they may be more likely to classify a wider range of ailments as problems.

When duration of health problem is cross-classified by severity (Table 2.7), an interesting difference shows up between whites and blacks. Among whites, disabilities that totally prevent working are, on the average, not as long standing as those that merely limit amount or type of work. Half of the former but two-thirds of the latter have lasted longer than five years. Among blacks, there is no such difference in the two types of disability.

The proportion of men who rate their health as "excellent" or "good" is not far different from the proportion who report themselves free of problems that affect their ability to work (78 percent versus 74 percent) (Table 2.6). This proportion varies from 82 percent for the 45-49 year olds to 72 percent for the 55-59 year olds. Blacks are more likely than whites to rate their health as only "fair" or "poor": 30 percent versus 22 percent.

There is a close, but by no means perfect, association between our two measures of health and physical condition (Table 2.8). As many as three-tenths of those who claim to be in "fair" or "poor" health nevertheless claim that they have no problems that affect their work. Conversely, 15 percent in "excellent" or "good" health report their work activity limited in some way. There is no reason, of course, to expect perfect consistency between the two measures. An amputee, for example, may recognize that he has a physical limitation that affects his work, but nevertheless feel that he enjoys excellent health. On the other hand, there are types of malaise that do not necessarily affect work in any obvious way, but which are recognized as departures from perfect health.

For both whites and blacks there is an inverse relationship between the existence of health problems affecting work and educational attainment,at least through 12 years of schooling. The higher the level of education, the smaller the proportion of men who are prevented totally from working and the smaller the proportion who experience work limitations. This difference may in part be attributable to higher standards of living made possible by the higher incomes which education commands. It may also reflect a direct effect of education on health, since the more educated may be more enlightened about the importance of good health, regardless of income. On the other hand, the more educated probably also come from families which both gave their children a relatively high level of education and imparted a value structure which stressed good health care. Thus, the effect of education on health may be overstated due to the independent influences of family income and family environment in youth. However, one additional explanation may be that educated men are more likely to be in types of jobs (e.g., white collar) in which a given physical impairment is less likely to interfere with work.

Table 2.7 Duration of Health Problem, by Effect of Health on Work: Men 45-59 Years of Age with a Health Problem, by Color

(Percentage distribution)

Duration of health problem (years)	WHITES			BLACKS			TOTAL		
	Limits	Prevents	Total	Limits	Prevents	Total	Limits	Prevents	Total
Less than 1	5	12	6	3	6	3	4	11	5
1-2	16	18	16	20	22	20	16	19	16
3-4	16	18	16	23	16	22	16	18	16
5-9	21	24	22	16	22	17	21	24	21
10 or more	43	28	41	39	33	38	43	28	41
Total percent	100	100	100	100	100	100	100	100	100
Total number (thousands)	3,101	446	3,546	311	72	383	3,411	518	3,930

Table 2.8 Effect of Health on Working, by Selected Characteristics: Men 45-59 Years of Age with Work Experience, by Color

(Percentage distribution)

Effect of health on work	Self-rating of health		Years of school completed					Marital status			Total
	Excellent or good	Fair or poor	8 or less	9-11	12	13-15	16 or more	Married	Never married	All other	
						WHITES					
Does not limit	84	31	66	75	79	82	80	75	68	60	74
Limits kind or amount	15	55	29	22	20	17	18	22	25	30	23
Prevents	0	14	5	4	1	1	2	3	6	10	3
Total percent	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	10,339	2,782	4,840	2,897	3,262	1,182	1,352	12,229	617	727	13,608
						BLACKS					
Does not limit	87	37	69	76	82	77	84	74	42	73	72
Limits kind or amount	12	47	24	22	16	19	14	22	44	19	22
Prevents	0	16	7	2	1	3	2	4	14	8	5
Total percent	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	935	416	916	232	155	42	47	1,135	61	200	1,400
						TOTAL					
Does not limit	85	32	66	75	79	82	80	75	66	63	74
Limits kind or amount	15	54	28	22	19	17	18	22	27	28	23
Prevents	0	14	6	3	1	1	2	3	7	9	4
Total percent	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	11.274	3,198	5.755	3,129	3,417	1,224	1,399	13,363	678	928	15,008

Never-married men reported more, and more serious, health limitations than did married men. Whereas 34 percent of the never-married group were limited in their work due to health, only 25 percent of the married men were so limited. The never-married were more than twice as likely as the married to be totally prevented from working. This pattern is much stronger in the case of the black men than in the case of whites. Curiously, in the case of whites, the widowed, separated, and divorced men had the greatest incidence of health problems, while in the case of the blacks, the incidence among this group was about identical to that among married men.

III.

Employment Characteristics

We turn now to an examination of certain important employment characteristics of the men in our age cohort that will be used in subsequent chapters to help explain variations in labor market behavior: occupation, industry, and class of worker on current (or most recent) job.

Occupation, Color, and Age

Almost one-half of men 45-59 years of age are blue collar workers, slightly over a third are white collar workers, 6 percent are service workers, and 9 percent are farm workers (Table 2.9). Because of their higher average age, the age-cohort of men under consideration has a slightly different occupational distribution from the entire male labor force. Employed men covered by our survey are somewhat more likely than the total employed labor force to be managers (17 percent versus 13 percent), craftsmen (24 percent versus 20 percent), and farmers (7 percent versus 4 percent); but slightly less likely to be non-managerial white collar workers (21 percent versus 25 percent), operatives (18 percent versus 21 percent), and farm or nonfarm laborers (8 percent versus 10 percent).[7] The occupational distribution of the sub-group of men 45-54 years of age in our study is almost identical to the occupational distribution of that group in the entire labor force as shown by special tabulations of the Current Population Survey of June, 1966.

For the 15-year age category under consideration, there are few consistent relationships between occupation and age. Perhaps the most pronounced is the increasing proportion of farm workers as age increases, from 7 percent of the 45-49 year old group to 11 percent of the 55-59

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[7] Manpower Report of the President, 1967 (Washington: Government Printing Office, 1967), p. 212.

Table 2.9 Major Occupation Group, by Age: Men 45-59 Years of Age with Work Experience, by Color

(Percentage distribution)

Major occupation group	WHITES				BLACKS				TOTAL			
	45-49	50-54	55-59	Total 45-59	45-49	50-54	55-59	Total 45-59	45-49	50-54	55-59	Total 45-59
White collar	40	39	38	39	19	12	11	14	38	36	35	36
Professional and technical	12	10	11	11	6	3	2	4	12	9	10	10
Nonfarm managers and proprietors	15	19	18	17	4	4	4	4	14	18	17	16
Clerical	6	5	4	5	7	4	3	5	6	5	4	5
Sales	6	5	4	5	1	1	2	1	5	5	4	5
Blue collar	49	48	45	47	62	61	56	60	50	48	46	48
Craftsmen and foremen	27	23	24	25	15	13	10	13	25	22	23	24
Operatives	19	18	16	18	28	29	24	27	20	19	17	19
Nonfarm laborers	4	6	5	5	20	20	22	20	5	7	6	6
Service	5	5	6	5	12	15	19	15	6	6	8	6
Farm workers	7	9	11	9	7	12	14	11	7	9	11	9
Farmers and farm managers	5	7	8	7	4	5	5	4	5	7	8	6
Farm laborers	1	2	3	2	4	7	10	6	1	2	3	2
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	4,977	4,615	4,016	13,608	522	478	399	1,400	5,499	5,094	4,415	15,008

year olds. This cross-sectional result is not expected to hold in a time series, since it probably reflects the declining importance of agriculture rather than occupational mobility within individual careers.

The color differences in occupational distribution are substantial. Only 14 percent of the black men are white collar workers, compared to 39 percent of the whites. A black man is less than half as likely as a white to be a professional or technical worker, less than a fourth as likely to be a manager or proprietor, half as likely to be a craftsman, but four times as likely to be a nonfarm laborer and three times as likely to be a service worker. Although there is not much difference between proportions of whites and blacks in farm occupations (9 percent versus 11 percent), the composition of this category is very different between the two color groups. Almost four-fifths of the whites who are farm workers are owners or managers, as contrasted with 36 percent of the blacks. There is evidence of a reduction over time in the occupational differences between the color groups, since the differences are much more pronounced in the oldest age category than in the youngest. For example, among men 55-59, whites are three times as likely as blacks to be in white collar jobs; among the group ten years younger, the ratio is only 2:1. Among the older men, whites are two-and-one-third times as likely as blacks to be craftsmen; among the younger men, only one-and-four-fifths as likely.

Class of Worker

As might be expected, a much larger proportion of employed men 45-59 years old than of the total employed male labor force is self employed (19 percent versus 11 percent), and a somewhat larger proportion is employed by government (16 percent versus 14 percent).[8] Whites are considerably more likely than blacks to be self employed (Table 2.10). Government employment accounts for about 14 percent of the total age group, slightly higher among blacks than among whites.

Table 2.10 Class of Worker: Men 45-59 Years of Age with Work Experience, by Color
(Percentage distribution)

Class of worker	WHITES	BLACKS	TOTAL
Wage and salary	80	89	81
Government	14	18	14
Private	67	71	67
Self-employed	20	11	19
Total percent	100	100	100
Total number (thousands)	13,608	1,400	15,008

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[8] *Ibid.*, p. 213.

Industry

Manufacturing accounts for a considerably larger proportion of men in this age category than any other industry division -- three-tenths of the total (Table 2.11). Trade and services are the next largest employers, accounting for 15 percent and 13 percent, respectively. Construction, agriculture, and transportation and public utilities each accounts for about one-tenth. There is no difference between the two color groups in industrial distribution, except for a slightly greater tendency for blacks to be in agriculture and a correspondingly lesser tendency for them to be in trade. The only relationships between age and industrial affiliation worthy of mention are the smaller proportions of the oldest age group in manufacturing, the declining importance of public administration as age increases, and the increasing proportions of workers in agriculture and the service industry as age increases.

Occupation and Educational Attainment

While there is a clear relationship between the major occupation group in which a man serves and the number of years of school he has completed, it is perhaps even more important to note the rather substantial heterogeneity of the occupation categories with respect to educational attainment (Table 2.12). The most homogeneous is the "professional, technical, and kindred" category, in which 54 percent of the whites and 59 percent of the blacks have 16 or more years of schooling. Nevertheless, almost three out of ten of each color group in this occupation category have no more than 12 years of education. As another example, the typical white male clerical worker has 12 years of education (42 percent), but as many as one in seven have had no high school and more than one-fifth have had some college.

Managers, proprietors, and officials are especially diverse with respect to education. About a third of the white men in this category have only high school diplomas, but one-seventh have college degrees, and, at the other extreme, a slightly larger fraction (18 percent) have not gone beyond the eighth grade.

The blue collar occupations are homogeneous in the sense that very few men in them have had any college (4 percent of the whites and 2 percent of the blacks). Nevertheless, the total blue collar group of white men is divided almost equally among those with less than eight years of schooling, those with exactly eight years of schooling, those with 9-11 years, and those who completed high school. Within the blue collar group, educational attainment is related to skill level; even so, the variation within each level is substantial. For example, almost one-fifth of craftsmen have not completed the eighth grade; about a seventh of laborers have high school diplomas.

Table 2.11 Major Industry Division, by Age: Men 45-59 Years of Age with Work Experience, by Color

(Percentage distribution)

Major industry division	WHITES				BLACKS				TOTAL			
	45-49	50-54	55-59	Total 45-59	45-49	50-54	55-59	Total 45-59	45-49	50-54	55-59	Total 45-59
Agriculture	7	9	11	9	8	13	15	12	7	10	11	9
Mining, forestry, and fisheries	1	1	1	1	2	1	0	1	1	1	1	1
Construction	11	10	12	11	15	14	9	13	12	10	12	11
Manufacturing	32	32	25	30	29	28	27	28	32	31	25	30
Transportation and public utilities	8	10	11	10	10	10	11	10	9	10	11	10
Wholesale and retail trade	16	15	15	15	10	11	13	11	15	15	15	15
Finance, insurance, and real estate	4	3	4	4	3	3	2	3	4	3	4	4
Services	12	13	15	13	13	14	18	15	12	13	15	13
Public administration	9	6	6	7	10	5	5	7	9	6	6	7
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	4,977	4,615	4,016	13,608	522	478	399	1,400	5,499	5,094	4,415	15,008

Table 2.12 Years of School Completed, by Major Occupation Group: Men 45-59 Years of Age with Work Experience, by Color

(Percentage distribution)

Years of school completed	Professional and technical	Nonfarm managers and proprietors	Clerical	Sales	Craftsmen and foremen	Operatives	Nonfarm laborers	Service	Farmers and farm managers	Farm laborers	Total
	WHITES										
7 or less	1	8	7	5	19	27	39	22	23	61	18
8	3	10	7	8	23	26	28	21	33	23	18
9-11	9	20	22	19	28	24	20	25	17	8	21
12	16	32	42	36	25	18	13	24	19	8	24
13-15	17	15	14	20	4	3	1	7	6	0	9
16 or more	54	14	7	11	1	1	0	2	2	0	10
Total percent	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,492	2,347	727	704	3,334	2,418	642	738	915	249	13,608
Median years completed(1)	16+	12.4	12.3	12.5	9.8	8.9	8.4	9.8	8.8	6.5	11.0
	BLACKS										
7 or less	0	38	9	9	47	56	70	53	72	88	54
8	10	10	6	0	19	12	9	12	9	10	12
9-11	6	18	26	36	20	19	17	16	6	1	17
12	10	19	40	32	12	10	4	14	8	1	11
13-15	15	6	10	5	1	3	1	4	5	0	3
16 or more	59	8	8	17	0	0	0	0	0	0	3
Total percent	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	58	57	65	19	177	376	284	208	61	89	1,400
Median years completed(1)	16+	9.3	12.2	12.2	8.2	7.1	5.7	7.5	5.5	4.5	7.4

(1) Medians were computed from grouped data which were assumed to be continuous even though respondents reported only full years of school completed.

Inter-color differences in educational attainment vary a great deal among occupational categories. Black professionals appear to have as many years of schooling as white men in that category; in the case of clerical and sales workers, the differences between blacks and whites are very small. On the other hand, in every other occupation category the difference in median years of school completed is at least one-and-one-half years, and is three years or more for managers and proprietors, laborers, service workers, and farmers. An important conclusion that emerges from this comparison is that use of the one-digit occupational classes reveals only very imperfectly the functional differences in employment among whites and blacks. On the assumption of a consistent relationship between years of schooling and job function or job performance, it would follow that black men who are, say, operatives either are less productive than white men in the same occupations or are concentrated more heavily than white men in the same occupations within the operative category. Our evidence does not lead to the same conclusion, however, with respect to black men in the non-managerial white collar occupations. These are relationships that must be kept in mind in interpreting inter-color differences in such factors as rates of pay and unemployment experience, even when occupation is controlled.

Occupation and Class of Worker

Among the major occupation groups, "farmers and farm managers" and "managers, proprietors,and officials" obviously include much larger proportions of self-employed men than any other major occupation group, 99 percent and 36 percent, respectively (Table 2.13). Salesmen, professionals, and craftsmen all have at least one out of every ten who is self employed. Of all self-employed men 45-59, 34 percent are farmers, 31 percent are nonfarm proprietors, 13 percent are craftsmen, and 8 percent are professionals.

Black men who are managers are nearly twice as likely as whites (62 percent versus 36 percent) to be self employed. This is doubtless partly due to the color discrimination in hiring and promotion to managerial positions and partly to educational disadvantages of blacks. There are very few black salesmen, but they are twice as likely as their white counterparts to be self employed; 35 percent as compared to 16 percent. Black craftsmen and operatives are more likely than whites to be government employees and less likely to be self employed. On the other hand, well over two-fifths of white men in the service occupations are government employees, as compared to 28 percent of the black workers in those occupations.

Occupation and Health

There are relationships between occupation and health, but they are not as consistent for black men as for white men. In the case of whites, whether health is measured by self-rating or by reported

Table 2.13 Proportion of Men with Selected Characteristics, by Major Occupation Group: Men 45-59 Years of Age with Work Experience, by Color

Major occupation group	Total number (thousands)	Percent				
		Self-employed	Government employees	Whose health limits or prevents working	Who rate their health excellent or good	Married
	WHITES					
Professional and technical	1,492	15	29	21	89	93
Nonfarm managers and proprietors	2,347	36	9	23	86	95
Clerical	727	0	38	25	78	89
Sales	704	16	0	24	81	90
Craftsmen and foremen	3,334	10	10	24	79	93
Operatives	2,418	5	6	27	76	88
Nonfarm laborers	642	5	20	32	66	82
Service	738	8	45	38	78	80
Farmers and farm managers	915	99	0	36	65	88
Farm laborers	249	3	5	43	59	63
Total or average	13,608	20	14	26	79	90
	BLACKS					
Professional and technical	58	10	60	28	80	96
Nonfarm managers and proprietors	57	62	10	38	68	96
Clerical	65	1	53	8	82	83
Sales	19	35	4	18	65	78
Craftsmen and foremen	177	9	19	21	78	79
Operatives	376	4	9	24	73	86
Nonfarm laborers	284	2	16	29	62	77
Service	208	5	28	30	72	78
Farmers and farm managers	61	98	0	35	52	94
Farm laborers	89	0	2	47	46	67
Total or average	1,400	11	18	27	69	81
	TOTAL					
Professional and technical	1,550	15	30	21	88	94
Nonfarm managers and proprietors	2,404	36	9	23	86	95
Clerical	792	0	39	24	79	88
Sales	723	17	0	24	81	90
Craftsmen and foremen	3,512	10	10	23	79	93
Operatives	2,794	5	6	27	76	88
Nonfarm laborers	926	4	19	31	64	80
Service	945	7	41	36	76	79
Farmers and farm managers	976	99	0	36	64	88
Farm laborers	337	2	4	44	56	64
Total or average	15,008	19	14	27	78	89

conditions that affect work, white collar workers -- and particularly professionals -- appear to enjoy better health than men in any other occupation category. Service workers, farmers, and farm and nonfarm laborers are at the other extreme.

Among black men, on the other hand, although the same pattern tends to prevail in the case of the self-rating measures of health, there are marked exceptions when the effect of health on work is used as the measure. In this case, professionals contain a proportion of men with health problems that is larger than the corresponding proportion among craftsmen and operatives and about as large as the proportion among laborers and service workers. Black men in clerical occupations, on the other hand, have only 8 percent who report health problems -- lower by 10 percentage points than any other occupational category of *blacks or whites*. It is possible that these represent fairly substantial *sampling variations*, since the numbers of black men in the white collar occupations are rather small.

It is worth noting that when occupation is controlled, the relationship between color and the existence of health problems affecting work is actually reversed. That is, in every occupation group except professionals, managers and proprietors, and farm laborers, blacks have a *smaller* proportion of men with health problems than do whites. The self-rating measure, on the other hand, shows better health for whites in all occupation categories except clerical. These findings are perplexing, and reinforce our suspicions that there are cultural factors associated with color that influence the responses to the health questions in the interview schedule.

Occupation and Marital Status

There is a systematic relationship between marital status and occupation. Broadly speaking, the proportion of married men declines as one moves down the occupational hierarchy: from 94 percent of professionals and managers to 82 percent of nonfarm laborers and 64 percent of farm laborers. The pattern is roughly similar for both blacks and whites. The greater likelihood of a white man's being married does not prevail in all occupation categories. Among professionals, managers, and farm workers, the ratio of married men is higher for blacks than for whites.

Occupation and Nationality

There are no pronounced differences in occupational composition between third-generation Americans and men whose families immigrated to North America more recently. Within the latter group, there are several differences, depending on national origin. For example, those from southern Europe and Latin America are less likely to be managers or proprietors than are those of other national origins (Table 2.14).

Table 2.14 Major Occupation Group, by Nationality: White Men 45-59 Years of Age with Work Experience

(Percentage distribution)

Major occupation group	U.S. and Canada	North or West Europe	Central or East Europe	South Europe	Latin America	Other	Total
Professional and technical	11	13	9	9	5	8	11
Nonfarm managers and proprietors	18	18	21	12	8	17	17
Clerical	4	6	8	8	6	0	5
Sales	5	5	5	7	3	3	5
Craftsmen and foremen	24	25	25	26	6	26	25
Operatives	18	15	20	17	24	23	18
Nonfarm laborers	5	3	4	5	32	2	5
Service	4	6	4	12	6	18	5
Farmers and farm managers	8	8	3	3	0	3	7
Farm laborers	3	1	0	0	11	0	2
Total percent	100	100	100	100	100	100	100
Total number (thousands)	6,113	4,016	1,386	958	135	152	13,608

Latin Americans are more likely to be farm and nonfarm laborers and less likely to be craftsmen than are other nationality groups.

IV.

Financial Characteristics

Among the factors that presumably affect the labor market behavior of workers are their own earning capacity and the income upon which they may rely if they do not work. Accordingly, we examine here the man's wage rate on his current job; the income of the family unit, excluding the earnings of the man; and the total assets of the family.

Hourly Rate of Pay [9]

The rate of pay an individual commands is an important indicator of the degree of his success in the labor market. Theoretically, it also plays a role in conditioning his labor market decisions. In this section, we examine the relationships between rate of pay and a limited number of personal or environmental characteristics that will be used as explanatory variables in subsequent chapters. We look first at the influence of economic environment on earnings, then turn to the impact of health, education and training, length of service, age, industry, and nationality. Since there is clearly a close association between occupation and rate of pay, we control for major occupation group in all these analyses.

Environmental variables Clearly an individual's wage rate is influenced by the nature of the economic environment in which he works as well as by his personal characteristics. Our environmental variables, relating to primary sampling unit (generally county or SMSA) in which the respondent resided, are (1) the size of the labor force in the PSU, and (2) the unemployment rate in the PSU at the time of the 1960 Census. Only the former of the two has a pronounced relationship with wage rate that is characteristic of most major occupation groups.

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[9] The analysis in this section is restricted to employed wage and salary workers, since it is virtually impossible to ascertain to what extent the earnings of the self employed are wages as opposed to other kinds of returns. For employed wage and salary workers who reported rates of pay in terms of a time unit other than an hour, hourly rates were computed by first converting the reported figure into a weekly rate and then dividing by the number of hours usually worked per week.

As Table 2.15 indicates, for nearly every major occupation group, wage rate is positively related to labor force size. White men working in PSU's with a labor force of 500,000 or more have mean rates of pay 32 percent higher than those of whites employed in PSU's with a labor force of less than 100,000. Black men employed in the largest PSU's earn 81 percent more per hour than those in the smallest PSU's. Among both color groups, white collar workers employed in areas with the largest labor forces earn approximately 35 percent more per hour than do white collar employees in the most sparsely populated areas. For blue collar workers the corresponding differentials are 18 percent for whites and 68 percent for blacks. For blue collar workers and for the totals, percentage differentials between whites and blacks decline as labor force size increases.[10]

We are not prepared to offer a confident explanation for the strong association between hourly rate of pay and labor force size, but several possibilities may be explored. One plausible hypothesis is that a difference among cities of different size in occupational mix within major occupation groups is responsible for the wage differences associated with variation in labor force size. If this were the case, however, one would expect that the relationships found in the study cited above would be less pronounced than those which our data exhibit because that study used occupation categories somewhat more detailed than those employed in our analysis. Instead, we find that relative wage differences by labor force size are virtually the same in both studies.

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[10] See Kenneth J. Hoffman, "Metropolitan Area Pay Levels and Trends," Monthly Labor Review, (April, 1968), pp. 44-49. The study reported in this article found that persons in office clerical, skilled maintenance, and unskilled plant occupations earned respectively 11, 13, and 16 percent more per week in cities with a population of 1,000,000 or more than in cities with a population of less than 250,000. If labor force participation rates (relative to total population) were approximately 40 percent in all areas, the above population categories would correspond to cities with labor forces of more than 400,000 and those with less than 100,000: roughly comparable to the labor force size categories used in our study. The relative wage differences that we have found are much greater than those just cited, in part because our measure of earnings is hourly wage rate rather than weekly earnings, and there is an inverse relation between hours-worked-per-week and labor force size, especially for whites. (Among employed white males 45-59 years of age, the average number of hours worked in the survey week was 44.3 in the largest and 50.6 in the smallest PSU's, respectively. Weekly earnings computed using these averages show that white men in the largest PSU's earn 16 percent more per week than do individuals in the smallest areas. This relative differential closely approximates that reported in the study by Hoffman.)

Table 2.15 Mean Rate of Pay per Hour (in dollars), by Size of Labor Force in PSU and Major Occupation Group: Employed Wage and Salary Workers 45-59 Years of Age, by Color

Major occupation group	WHITES				BLACKS			
	Less than 100,000	100,000-499,000	500,000 or more	Total	Less than 100,000	100,000-499,000	500,000 or more	Total
White collar	3.63	4.76	4.92	4.42	2.47	2.88	3.28	2.98
Professional and technical	3.90	5.20	5.70	4.91	2.54(1)	3.46(1)	3.94	3.40
Nonfarm managers and proprietors	4.01	5.32	5.53	4.88	3.35(1)	2.92(1)	3.36(1)	3.18
Clerical	3.05	3.33	3.29	3.23	2.21(1)	2.56	2.78	2.60
Sales	2.60	4.03	4.46	3.73	--(2)	2.65(1)	2.79(1)	2.70
Blue collar	2.84	3.19	3.35	3.09	1.66	2.45	2.79	2.29
Craftsmen and foremen	3.21	3.54	3.68	3.45	2.02	2.81	3.00	2.65
Operatives	2.50	2.78	3.05	2.74	1.72	2.28	2.65	2.24
Nonfarm laborers	2.40	2.43	2.79	2.50	1.43	2.45	2.86	2.15
Service	1.92	3.05	2.72	2.53	1.48	1.98	2.19	1.95
Farm	1.26	1.53(1)	1.75(1)	1.33	0.81	3.85(1)	--(2)	0.88
Total	2.98	3.81	3.94	3.51	1.52	2.43	2.76	2.22

(1) Mean is based on less than 20 sample cases.
(2) Dashes indicate empty cells.

Another possible explanation for the strong association between labor force size and hourly rate of pay is that higher living costs in larger metropolitan areas produce differences in money wages, but not in real wages. However, the wide range of variation for wage differentials by area size (from 8 percent to 71 percent among major occupation groups) indicates that cost-of-living differences alone are not the cause of this strong association. It could also be hypothesized that trade unions, generally known to be stronger and more pervasive in metropolitan areas, are responsible for the higher money wage rates in those areas. However, this explanation is made suspect by the data in Table 2.15, which reveal that wage differences by area size are, in general, smaller for blue collar workers -- among whom trade unions are certainly most prevalent -- than they are for white collar workers.

It is also noteworthy that the association between wage rate and labor force size is *not* a reflection of differences in unemployment rates. Unemployment rates for men in our sample are actually somewhat *higher* in the larger than in the smaller PSU's. Moreover, cross-classification of mean wage rates and PSU unemployment level reveals no consistent relationship. In summary, no single hypothesis appears to be capable of accounting for the wage rate differences associated with variations in labor force size, although it may be that all of the aforementioned factors have some influence.

Health and physical condition Both of our health measures are closely associated with wage rate. As Table 2.16 shows, in virtually every major occupation group for whites, those whose work activities are limited by their health condition have lower hourly rates of pay than do individuals with no health problem. For blacks this relationship does not appear to be as pervasive, but this may well be due to the fact that many of the arithmetic means are based on a small number of sample cases, and are hence unreliable.

Among whites, health problems have their most pronounced effect on the rates of nonfarm laborers and service workers. For each of these groups, those with no health limitation earn 32 percent more per hour than do individuals with limitations. Focusing only on those whites who do have health problems affecting the kind or amount of work they can do, we find an inverse relationship between wage rate and the duration of the health problem. However, the relationship is not consistent for all major occupation groups.

Our second measure of health, based on the individual's self-rating, is obviously more subjective and less directly related to work ability than the first. Nevertheless, there is also a strong relationship between this variable and wage rate. Table 2.17 shows that for nearly all major occupation groups among both blacks and whites, average rate of pay is higher the more favorable an individual's rating of his health.

Table 2.16 Mean Rate of Pay per Hour (in dollars), by Effect of Health on Work and Major Occupation Group: Employed Wage and Salary Workers 45-59 Years of Age, by Color

Major occupation group	WHITES		BLACKS	
	Limits kind or amount	Does not limit	Limits kind or amount	Does not limit
White collar	4.26	4.46	3.24	2.88
Professional and technical	4.39	5.02	3.06	3.49
Nonfarm managers and proprietors	5.00	4.86	3.61	2.87
Clerical	3.22	3.23	2.77	2.59
Sales	3.66	3.75	3.50	2.40
Blue collar	2.82	3.15	2.24	2.30
Craftsmen and foremen	3.19	3.50	2.23	2.72
Operatives	2.58	2.78	2.36	2.21
Nonfarm laborers	1.99	2.63	2.12	2.14
Service	2.07	2.74	1.87	1.96
Farm	1.23	1.37	.64	1.02
Total	3.22	3.59	2.08	2.25

Table 2.17 Mean Rate of Pay per Hour (in dollars), by Self-Rating of Health and Major Occupation Group: Employed Wage and Salary Workers 45-59 Years of Age, by Color

Major occupation group	WHITES				BLACKS			
	Excellent	Good	Fair	Poor	Excellent	Good	Fair	Poor
White collar	4.69	4.30	3.62	5.01(1)	3.10	2.95	2.82	1.27(1)
Professional and technical	5.04	4.81	4.91(1)	3.80(1)	3.52	3.86(1)	2.83(1)	1.15(1)
Nonfarm managers and proprietors	5.35	4.67	4.02	4.22(1)	3.14(1)	3.09(1)	3.80(1)	-- (2)
Clerical	3.29	3.15	3.13	2.83(1)	2.84	2.40	2.60(1)	1.49(1)
Sales	3.78	3.78	2.48	10.67(1)	2.65(1)	-- (2)	2.75(1)	-- (2)
Blue collar	3.24	3.06	2.87	2.76	2.41	2.25	2.23	1.75
Craftsmen and foremen	3.58	3.41	3.31	3.28(1)	2.76	2.63	2.29	-- (2)
Operatives	2.86	2.72	2.57	2.56(1)	2.25	2.15	2.36	2.62(1)
Nonfarm laborers	2.81	2.45	2.20	1.94(1)	2.35	2.15	2.07	1.34(1)
Service	3.07	2.17	2.26(1)	2.15(1)	2.00	1.99	1.68	1.94(1)
Farm	1.35(1)	1.33	1.25(1)	1.48(1)	1.44(1)	0.95	0.70	0.61(1)
Total	3.82	3.42	2.99	3.25	2.44	2.17	2.07	1.37

(1) Mean is based on less than 20 sample cases.
(2) Dashes indicate empty cells.

Among whites, white collar workers who rate their health as excellent have an average wage 23 percent higher than the combined mean for those in the other three health categories; for blue collar workers the difference is 13 percent. Among blacks, the differences are 16 percent and 10 percent, respectively.

Educational attainment Education, as measured by the highest year of school completed, bears a positive relationship to rate of pay in the case of both whites and blacks (Table 2.18). Among whites, the relationship is more pronounced in white collar than in blue collar occupations. In blue collar occupations, those with 12 years of education earn 12 percent more per hour than those who have completed fewer than nine years of school, whereas this differential is 24 percent in the case of white collar workers. Similarly, the exposure to college adds relatively less to the pay of a blue collar worker than it does to that of a white collar worker. Among blacks, a high school education has approximately the same relative effect on the wage rate of white collar and blue collar workers.

Among white collar workers, there is a systematic tendency for the relative wage differentials between whites and blacks to increase with education. Among blue collar workers, however, the relative differential is constant except for a sizeable jump between the highest two education categories. The sizeable differential between whites and blacks for blue collar workers with more than 12 years of school is at least partly attributable to the occupational mix of the two color groups.

Vocational training For whites and blacks in nearly every major occupation group, hourly rate of pay is positively related to the number of training programs in which an individual has participated. Any interpretation of this association must admit to the strong possibility that factors related to training may be producing this pattern of association. For one thing, as has been seen, the extent of vocational training is positively related to educational attainment. For another, personality traits which cause an individual to desire additional training may also be conducive to his labor market success as measured by his rate of pay. The suspicion that this factor may indeed be operating is reinforced by an examination of the effect of time spent in training on hourly wage rates. It seems reasonable to hypothesize that the amount of time spent in training programs is a better indicator of the amount of training received than is the number of programs in which an individual has been enrolled. For most occupations, however, the data show that time spent in training has a less pronounced and less consistent impact on earnings than does number of programs. Among whites in professional, clerical, sales, and service occupations and among white craftsmen and laborers, one finds that persons with two or more programs cumulating to less than one year in duration have much greater mean rates of pay than do individuals with only one program lasting less than a year. In

Table 2.18 Mean Rate of Pay per Hour (in dollars), by Years of School Completed and Major Occupation Group: Employed Wage and Salary Workers 45-59 Years of Age, by Color

Major occupation group	WHITES				BLACKS			
	8 or less	9-11	12	13 or more	8 or less	9-11	12	13 or more
White collar	3.14	3.58	3.91	5.39	2.60	2.51	2.73	3.53
Professional and technical	2.28(1)	3.96	4.37	5.28	2.66(1)	2.09(1)	2.25(1)	3.77
Nonfarm managers and proprietors	3.25	3.95	4.39	6.38	3.25(1)	3.31(1)	2.58(1)	3.75(1)
Clerical	2.78	2.97	3.19	3.88	1.95(1)	2.50(1)	2.75	2.94
Sales	3.73	3.28	3.38	4.43	2.86(1)	2.11(1)	3.50(1)	2.72(1)
Blue collar	2.90	3.16	3.25	3.98	2.18	2.49	2.63	2.30(1)
Craftsmen and foremen	3.27	3.50	3.52	4.20	2.53	2.72	3.21(1)	3.10(1)
Operatives	2.62	2.74	2.87	3.44(1)	2.10	2.49	2.30	2.24(1)
Nonfarm laborers	2.48	2.58	2.41(1)	3.74(1)	2.07	2.35	2.78(1)	-- (2)
Service	1.83	3.57	2.58	3.08(1)	1.83	1.95	2.34	2.21(1)
Farm	1.21	1.79(1)	2.17(1)	-- (2)	0.85	1.45(1)	2.50(1)	-- (2)
Total	2.76	3.29	3.51	5.18	2.00	2.42	2.60	3.21

(1) Mean is based on less than 20 sample cases.
(2) Dashes indicate empty cells.

addition, for professionals, managers, persons in clerical and sales occupations, operatives and service workers, those with two or more programs that amounted to one year of training, earn much more per hour than do individuals who have had one program which lasted for more than one year.[11]

Length of service In many studies, an attempt to ascertain the effect of length of service in current job on hourly wage rate is complicated by the fact that length of service and age are closely correlated. Although there is some association between age and length of service among men 45-59 years of age, the nature of the association is such as to make it fairly easy to perceive the effect of length of service alone. Specifically, the mean age of individuals in every length-of-service category except 30 years or more is approximately 51 years for both blacks and whites. Thus, among whites, the strong positive relationship between length of service and average hourly earnings shown in Table 2.19 has not been distorted, at least for those with less than 30 years of service, by any age effect. Furthermore, each of these length-of-service categories has approximately the same occupational distribution. Thus, a crude regression using as data points the mid-points of the six shortest length-of-service categories and the mean wage rates for the workers in these categories should provide a reasonably accurate estimate of the size of the length-of-service effect. The results of these regressions indicate that a one year increase in length of service is associated with a 3.5-cent increase in the average hourly rate of pay of whites and a 3.0-cent-per-hour increase in the earnings of blacks.

It is interesting to note that for whites the relationship between earnings and length of service is more pronounced among white collar than among blue collar workers, and that among the latter, length of service has the most noticeable effect on the hourly earnings of operatives. Among blacks, however, all blue collar occupations benefit equally from length of service and in a much more pronounced manner than do white collar workers.

Color Substantial color-correlated differences in labor market status are evidenced by the fact that whites in every major occupation category earn more per hour than blacks, regardless of the variable used as a control. Very little of the inter-color difference in hourly

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[11] In addition to the interpretation suggested in the text, the data are also consistent with the hypothesis that men with a variety of training, even if not intensive in any one field, are more likely to be successful in the labor market.

Table 2.19 Mean Rate of Pay per Hour (in dollars), by Length of Service in Current Job (in years) and Major Occupation Group: Employed Wage and Salary Workers 45-59 Years of Age, by Color

Major occupation group	WHITES							BLACKS		
	Less than 1	1-2	3-4	5-9	10-19	20-29	30 or more	Less than 10	10-19	20 or more
White collar	3.47	4.01	3.74	4.06	4.65	4.50	5.62	2.48	3.17	2.99
Professional and technical	3.57	4.48	4.40	4.50	5.16	5.19	6.35	3.36	4.13(1)	2.81(1)
Nonfarm managers and proprietors	3.39(1)	4.47	3.68	4.51	5.19	5.02	5.88	2.67(1)	3.10(1)	3.61(1)
Clerical	2.52(1)	3.79(1)	2.93(1)	2.92	3.40	3.10	3.77(1)	2.00(1)	2.64	2.88
Sales	3.74(1)	2.90(1)	3.24(1)	3.64	4.29	3.79	4.53(1)	2.69(1)	2.71(1)	-(2)
Blue collar	3.07	2.82	2.72	2.80	3.00	3.46	3.34	1.97	2.46	2.59
Craftsmen and foremen	3.49	3.23	3.17	3.22	3.34	3.73	3.54	2.26	2.86	2.93
Operatives	2.55	2.37	2.23	2.36	2.77	3.17	3.12	1.83	2.36	2.51
Nonfarm laborers	2.19	2.74(1)	2.50(1)	2.32(1)	2.54	2.66(1)	3.01(1)	1.97	2.32	2.44
Service	1.73	1.99(1)	1.91(1)	2.12	3.70	3.12(1)	2.95(1)	1.78	2.06	2.28
Farm	1.12(1)	0.97(1)	1.17(1)	1.45(1)	1.32(1)	2.15(1)	1.34(1)	0.96	0.90(1)	0.67
Total	2.94	3.16	3.05	3.21	3.62	3.84	4.34	1.94	2.45	2.47

(1) Mean is based on less than 20 sample cases.
(2) Dashes indicate empty cells.

rate of pay is attributable to an inter-color difference in occupational distribution. If the mean rate of pay for blacks is standardized by assigning to blacks the occupational distribution of whites, the inter-color difference decreases from $1.29 per hour to $.89 per hour.[12] The relative differences in favor of whites range from 16 percent in the case of laborers to 53 percent for managers. Furthermore, education, good health, and length of service have more beneficial effects on the hourly rate of pay of whites than they do on those of blacks.

Total Family Income, Excluding Respondent's Earnings

Slightly less than one-fifth of all men 45-59 years of age (including those living alone) are the sole source of income in their household (Table 2.20). On the other hand, three out of ten are in households in which there was, in 1965, at least $3,000 of family income in addition to the man's earnings -- derived either from the earnings of other family members, from property, or from other sources (e.g., Social Security). The situations of white and black men are quite different in this respect. A much larger proportion of blacks than of whites are in households with no other income (28 percent versus 17 percent), a fact which doubtless reflects differences in marital status between the two color groups. Moreover, a white man is twice as likely as a black to be able to rely on additional family income of $5,000 or more (16 percent versus 8 percent) and about one-and-one-half times as likely to have other family income of between $3,000 and $4,999 (16 percent versus 11 percent).

Family Net Assets

The disparities between blacks and whites are considerably greater with respect to net assets than with respect to the income variable described above. More than four times as many blacks as whites have no assets (26 percent versus 6 percent); much less than half as many have assets of $10,000 or more (25 percent versus 59 percent). Slightly more than a fourth of all white men, but only 7 percent of the blacks, have a net worth of as much as $25,000.

V.

Summary and Conclusion

Since an important purpose of our study is to describe and explain

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[12] For a detailed explanation of the mechanics of the standardization procedure employed here see Appendix E.

Table 2.20 Family Financial Resources: Men 45-59 Years of Age, by Color

(Percentage distribution)

Family financial resource	WHITES	BLACKS	TOTAL
Family income in 1965, excluding respondents' earnings (1)			
None	17	28	18
Less than $1,000	28	30	28
$1,000 - $1,999	14	14	14
$2,000 - $2,999	10	9	10
$3,000 - $4,999	16	11	15
$5,000 or more	16	8	15
Total percent	100	100	100
Total number (thousands)	13,615	1,405	15,020
Family net assets (1)			
None	6	26	8
Less than $5,000	19	31	20
$5,000 - $9,999	17	18	17
$10,000 - $24,999	31	18	30
$25,000 or more	28	7	26
Total percent	100	100	100
Total number (thousands)	13,615	1,405	15,020

(1) Data include men not living with other family members as well as those with other family members in household.

differences in labor market experience and behavior between white and black men, it is extremely important to keep in mind the differences between these two groups in characteristics that may be expected to have an influence on labor market activity. There is scarcely a characteristic examined in this chapter with respect to which there is not a difference between white men and black men, and in many cases the difference is substantial. As compared with white men 45-59 years of age, black men in the same age category are significantly less likely to be well educated (even within a given major occupation group), to have had vocational training, and to be married, but they are much more likely to have dependents other than wives. They are more likely to be completely disabled from working, but about as likely to report problems of health or physical condition that affect the amount or kind of work they can do. Partially as a result of some of these differences, black men are considerably less likely than whites to be in the most desirable occupations, to be self employed, to enjoy high wage rates even within the same occupational categories as whites, and to be able to rely on resources other than their own earning power for their livelihoods.

Within each color group, there are also relations among variables that should be kept in mind for the analysis in subsequent chapters. The fact that the total group of men under consideration falls within a 15-year spread means that for some purposes it will not be necessary to control for age in the analysis. For example, there is little or no difference among the three five-year age groups in marital status, occupational or industrial distribution. On the other hand, as might have been expected, older men are more likely than younger men to be poorly educated, to have health problems, and to be self employed as distinguished from wage and salary earners. They are less likely to have dependents other than wives.

When we examine the effect of education or training on success in the labor market we shall have to be mindful of the direct relation between training and education; otherwise we shall run the risk of overstating whatever positive effect either one may have. Similarly, in analyzing the effect of occupation by means of two-way tables, we shall have to bear in mind the greater incidence of self employment in some occupational categories than in others, the relationship between marital status and occupational level, and the inverse relationship between occupational level and the incidence of health problems. Finally, even controlling for major occupation group, we have found differentials in average rate of pay in favor of white men, of persons with good health, and of those with more education, training, and length of service.

Chapter 3*

VARIATION IN LABOR MARKET PARTICIPATION

The labor market participation of men aged 45-59 is of special interest because during those years most men are passing from their period of peak productivity and earning power to a period of leveling off, or decline, in productivity and earning power. Accordingly, there is an increasing frequency of permanent and temporary withdrawal from the labor force due to illness, voluntary retirement, or difficulty in finding new jobs when old jobs are lost. Even for men aged 55-59, the overwhelming majority (about 90 percent) remain employed. Nevertheless, the fraction of men aged 55-59 not in the labor force during the survey week is more than three times as great as the corresponding fraction of men aged 45-49. Obviously, changes in labor force behavior occur with age. The purpose of this chapter is to explore the conditions which influence variation in the labor market participation of men in this interesting age group.

The discussion of labor market participation in this chapter deals with one of the most important parts of labor market analysis--the determinants of the timing and amount of services offered to the labor market, i.e., labor supply. By labor supply, we refer here to the relationship between the quantity of hours men offer to work in the market and the independent variables to which these offers respond. Labor supply must be measured in several dimensions, since the quantity of hours offered can vary in at least the following ways: (1) hours per day, (2) days per week, (3) weeks per year, (4) years per lifetime. This list ignores at least two important dimensions of labor supply: the intensity of effort per hour and the quality or skill level of the hours offered. We use our survey data to discuss information of the following measures of labor services offered: (1) the number of hours per week, (2) the number of weeks per year, and (3) whether or not an individual is in the labor force as a worker or as a job seeker. Measure (3) deals with what is usually called labor force participation. It is but one of the ways to measure labor services offered.

One way of viewing the labor force participation rate is as a reflection of the fraction of his lifetime during which a man will offer his labor services. Thus, if we measure labor services offered solely in terms of hours per week and weeks per year, we would ignore an important dimension of labor supply by not considering the probability that a man would offer any hours at all. In a purely arithmetical sense, a man who is neither employed nor unemployed may be thought of as assuming a zero value with respect to measures (1) and (2), and a case can be made for subsuming labor force participation in these dimensions. However, for males aged 45-59 there is little continuity in labor force behavior in the smaller values of these measures, and treating labor services offered as a discrete as well as a continuous variable is justified, because the zeroes on the continuous scales are indeed special cases.

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* This chapter was written by Belton M. Fleisher assisted by Karl A. Egge.

To what extent is it in fact legitimate to view observations on measures (1), (2), and (3) as observations of offers of labor services; may they not at times reflect the demand for labor services as well as the supply? To begin with hours worked, there is no doubt that in individual cases the number of hours worked per week can be less than the amount desired, because, say, of temporarily slack demand for labor that causes a reduction in the amount of overtime work available or even a temporary reduction in the length of the normal workweek. Since our data do not provide information about the number of hours men wish to work, it is difficult to deal with this problem, and no attempt to do so is made in this chapter. There is probably general agreement among economists that instances in which workers are forced to work more hours than they desire, rather than less, are not very numerous. A reason for believing that such instances are rare is that in a market economy, employers would attempt to force workers to put in undesired long hours only when the labor market is tight; but this is precisely the situation in which workers who dislike their working conditions have the best chance of finding alternative jobs.

The other measures of labor services--weeks per year in the labor force and current labor force participation--are based upon whether the individual is seeking work as well as whether he is actually working. The measures, therefore, do not suffer from quite the same weakness as does hours worked per week, since they are much more unambiguously measures of labor supply.

I

Basic Correlates of the Labor Market Participation Measures

Color

Practically any conceivable measurement of the amount of labor services offered (or sold) is different, on the average, for whites than it is for blacks (Table 3.1), and in this respect, our study corroborates what is generally well known. Our study shows the labor force participation rate of whites to be 3.7 percentage points greater than that of blacks during

Table 3.1 Selected Measures of Labor Market Participation: Men 45-59 Years of Age, by Color

Measure of labor market participation	WHITES	BLACKS
Total number with work experience (thousands)	13,608	1,400
(1) Labor force participation rate(1)	94.3	90.6
Labor force participation rate standardized(2) by the occupational mix of the other color	91.4	93.5
(2) Average number of weeks in the labor force in 1965	48.8	47.4
Average number of weeks in the labor force in 1965 standardized by the occupational mix of the other color	47.4	48.1
Total number who worked during the survey week (thousands)	12,017	1,184
(3) Average number of hours worked during the survey week	47.5	42.6
Average number of hours worked during the survey week standardized by the occupational mix of the other color	45.7	44.7

(1) We should note that throughout this chapter we use "men with work experience" as our population for computing labor force participation rates rather than "all men." The rates cited in the text and in the tables are 0.1 and 0.3 percentage points greater, respectively, for whites and blacks than the same rates based upon the total non-institutional male population in this age cohort. More specifically, our base excludes those 7,000 whites and 5,000 blacks who have never worked. This choice was made in order to facilitate table construction, and since our aim is to examine differences in these rates among men in various categories, the very small difference in absolute percentages between the two bases should not distort conclusions made from relative differences.

(2) For standardization procedure see Appendix E.

the survey week; the fraction of whites who were in the labor force in every week of the year preceding the survey was 3.8 percentage points greater than the fraction of blacks (Table 3.2), and the mean number of hours worked by working whites during the week prior to the survey was 4.9 hours greater than that of working blacks (Table 3.1). The fraction of whites who worked 41 hours per week or more was 14.1 percentage points greater than the fraction of blacks (Table 3.2). To discover the extent to which these inter-color differences in labor market participation are due to evidently basic differences in the economic circumstances (e.g., wage rates, incomes, unemployment) of whites and blacks and the extent they are due to differences in personal traits such as health and attitudes is an important purpose of this study.[1]

Many color-correlated conditions are capable of accounting for the inter-color differences in the various labor force measures. Thus, the differences between whites and blacks when standarized for characteristics such as marital status, health, family size, unemployment experience, and education tend to be smaller than when no standardization is performed.

An easy way of summarizing much of the influence of color-correlated circumstances on labor market behavior is to examine the behavior of whites and blacks by major occupation group. Most of the conditions contributing to inter-color differences in hours worked, weeks in the labor force, and labor force participation rates, are reflected in occupational status as well. Thus, occupation provides a convenient "catch-all" variable for investigating those differences between whites and blacks in important aspects of labor market behavior which are due to differences in underlying identifiable characteristics and circumstances.

Table 3.3 provides information on the labor force participation rates during the survey week of whites and blacks by major occupation group. While the overall difference between the labor force participation rates of whites and blacks is 3.7 percentage points, the differences between the rates when occupation is held constant are much smaller, and sometimes of the opposite sign. When blacks are assigned the occupation distribution of whites, their average labor force participation rate rises to 93.5 percent, reducing the excess of the white participation rate to only 0.8 percentage points (Table 3.1). Thus, a very substantial

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[1] To the extent that we cannot account for differences between whites and blacks in labor market participation by means of differences in their economic and personal characteristics, we must conclude that the unexplained variation in behavior is due to differences between whites and blacks in their responses to such variables. The extent to which such response differences are due to racial discrimination is impossible to measure, because we have no measures of such discrimination not reflected in wage rates, unemployment, education, etc., nor do we have an alternative theory about why such response differences should exist.

Table 3.2 Selected Measures of Labor Market Participation: Men 45-59 Years of Age, by Color

Measure of labor market participation	WHITES	BLACKS
Weeks in the labor force during 1965		
Less than 26	4.9	7.2
26-47	6.4	8.6
48-51	6.0	5.2
52	82.7	78.9
Total percent	100.0	100.0
Total number with work experience (thousands)	13,608	1,400
Hours worked during survey week		
1-34	13.3	19.0
35-40	30.4	38.8
41 or more	56.3	42.2
Total percent	100.0	100.0
Total number who worked during survey week (thousands)	12,017	1,184

portion of the inter-color difference in labor force participation rates is due to conditions correlated with occupational mix.

When average number of weeks in the labor force in 1965 (another of our measures of labor supply) is calculated for each major occupation group (Table 3.3), and standardized by occupation (Table 3.1), we again find that much of the difference between whites and blacks is due to the inter-color difference in occupational mix. If we assign blacks the occupation distribution of whites, their mean weeks in the labor force rises from 47.4 to 48.1, reducing the inter-color difference.

Table 3.3 also shows a third measure of labor supply; hours worked during the survey week by color and major occupation group. Although within most occupations the excess of the number of hours worked by whites over the number worked by blacks is smaller than for all occupations taken together, this is not true for the farm occupations. When blacks are assigned the occupation distribution of whites, their average number of hours worked rises to 44.7. Thus, occupation distribution appears to account for a good portion of the difference in hours worked between the two color groups. Of course, both from a purely scientific and from a policy-oriented point of view, the crucial question is what the particular correlates of occupation are that cause the difference in labor market participation between whites and blacks. Much of the subsequent analysis in this chapter is directed at that question.

Age

The mean number of hours worked per week tends to decline with age. Both whites and blacks aged 55-59 average about one less hour of work per week than do men aged 45-49 (Table 3.4). Note, however, that men 45-59 tend to work more than the mean number of hours worked by all males.[2] For instance, in June, 1966 (approximately the time of this survey) the average hours worked per week by all males 14 years of age and older was 44.1,[3] whereas the men in our sample averaged 47.1 hours of work during the survey week.

Labor force participation during the survey week declines sharply with age, especially when the 55-59 year old age group is compared with respondents 45-49 and 50-54 years of age. Among whites, the labor force participation rate is 6.4 percentage points lower for the oldest age group than it is for the youngest age group (Table 3.4). Among blacks the difference is 8.8 percentage points.

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[2] Monthly Labor Review, (June, 1967), p. 109.

[3] Computed from Current Population Survey, June, 1966.

Table 3.3 Selected Measures of Labor Market Participation, by Major Occupation Group: Men 45-59 Years of Age, by Color

Major occupation group	Total number with work experience (thousands)	Labor force participation rate	Average number of weeks in labor force in 1965	Total number working in survey week (thousands)	Average number of hours worked in survey week
	WHITES				
Professional and technical	1,492	96.4	50.0	1,347	46.1
Nonfarm managers and proprietors	2,347	97.1	51.4	2,174	51.6
Clerical and sales	1,431	95.9	49.8	1,279	46.0
Craftsmen	3,334	95.0	48.7	2,967	43.3
Operatives	2,418	91.4	47.8	2,035	44.1
Nonfarm laborers	642	87.9	44.7	503	40.5
Service	738	89.0	47.3	613	46.6
Farmers and farm managers	915	97.6	49.8	869	67.3
Farm laborers	249	84.7	44.3	204	53.6
Total or average	13,608	94.3	48.8	12,017	47.5
	BLACKS				
Professional and technical	58	98.8	49.7	56	43.1
Nonfarm managers and proprietors	57	96.2	48.9	51	51.2
Clerical and sales	84	92.6	48.6	76	45.4
Craftsmen	177	93.6	47.4	151	41.9
Operatives	376	91.6	47.8	318	43.7
Nonfarm laborers	284	86.6	46.5	228	36.9
Service	208	87.7	47.4	169	42.0
Farmers and farm managers	61	98.9	49.3	58	48.4
Farm laborers	89	85.0	44.0	72	44.9
Total or average	1,400	90.6	47.4	1,184	42.6

The proportion of white men who spent 52 weeks in the labor force in 1965 declines with age, especially among blue collar workers (Table 3.5). (Among blacks, the fraction of white collar workers who were in the labor force 52 weeks rises with age, but the number of such workers is small.) We suspect that this relationship is due to deteriorating health as age rises, a relationship that has been pointed out in Chapter 2. This is a factor that will be explored in greater detail later.

Table 3.4 Selected Measures of Labor Market Participation, by Age: Men 45-59 Years of Age, by Color

Age	Total number with work experience (thousands)	Labor force participation rate	Total number working in survey week (thousands)	Average number of hours worked in survey week
	WHITES			
45-49	4,977	96.6	4,541	47.9
50-54	4,615	95.3	4,115	47.6
55-59	4,016	90.2	3,361	47.0
Total or average	13,608	94.3	12,017	47.5
	BLACKS			
45-49	522	94.4	464	42.7
50-54	479	91.0	407	43.0
55-59	399	85.2	318	41.9
Total or average	1,400	90.6	1,184	42.6

Marital Status

The mean number of hours worked per week by married men is greater than the mean number of hours worked by the widowed, separated, or divorced males among both whites and blacks (Table 3.6). Among both color groups, the average number of weeks in the labor force in 1965 was substantially larger for married men than for those who were widowed, divorced, or separated. The positive difference in the average number of weeks in the labor force between married men and all men is 0.4 weeks for whites and 0.7 weeks for blacks. The current labor force participation rate of married men is substantially higher than for any other marital-status group. The never-married group among both whites and blacks has the lowest labor force participation rate, although this relationship is much less pronounced among whites than among blacks.

Thus, it is clear that married men are in the labor force more, and probably work more, than other men, a relationship that is

Table 3.5 Proportion of Men Who Were in the Labor Force for 52 Weeks in 1965, by Age and Type of Occupation: Men 45-59 Years of Age, with Work Experience, by color

Age and type of occupation	WHITES		BLACKS	
	Total number with work experience (thousands)	Percent in labor force 52 weeks in 1965	Total number with work experience (thousands)	Percent in labor force 52 weeks in 1965
45-49				
White collar	1,960	88.8	99	85.1
Blue collar	2,426	80.7	322	78.2
50-54				
White collar	1,798	86.0	57	86.0
Blue collar	2,167	78.4	291	81.9
55-59				
White collar	1,512	87.7	43	87.5
Blue collar	1,802	77.2	223	72.4
Total or average				
White collar	5,270	87.5	199	85.9
Blue collar	6,395	78.9	837	77.9

Table 3.6 Selected Measures of Labor Market Participation, by Marital Status: Men 45-59 Years of Age, by Color

Marital status	Total number with work experience (thousands)	Labor force participation rate	Average number of weeks in labor force in 1965	Total number working in survey week (thousands)	Average number of hours worked during survey week
			WHITES		
Married	12,229	95.3	49.2	10,922	47.7
Widowed	233	82.3	46.7	184	46.8
Divorced or separated	494	86.9	45.8	394	44.1
Never married	617	83.7	45.0	493	48.0
Total or average	13,608	94.3	48.8	12,017	47.5
			BLACKS		
Married	1,135	92.6	48.1	984	43.2
Widowed	61	79.4	43.3	47	38.1
Divorced or separated	139	87.1	46.1	113	41.1
Never married	61	70.5	42.3	37	39.6
Total or average	1,400	90.6	47.4	1,184	42.6

consistent with the findings of other studies.[4] An important feature of future analysis of our data will be to establish which psychological, health, and/or economic variables underlie the association between labor force attachment and marital status. The conditions responsible for the relationship between marital status and labor market attachment probably are associated with factors causing lower unemployment among married men than among the other groups and probably are also associated with married men having more incentive than others to maintain high earnings. These conditions will be sought out in our future work.

Health

The problem of dealing with the relationship between health and labor force behavior is difficult, because our health measures are based exclusively on answers to questions asked of respondents. Thus, whether a respondent answers that his health "limits the kind or amount of work" he can do depends on: (1) his "actual" health as it might be evaluated by a competent physician, (2) his own state of mind regarding health and his tolerance of illness, and (3) the effect health conditions have on his ability to work. Obviously, condition (3) depends largely on the occupation or industry of the worker. The effect of objectively-measured health on labor force behavior will interact with occupation and industry in rather obvious ways. Furthermore, a respondent's state of health will often be influenced by the working conditions of his past and present jobs and by his economic ability to obtain medical care and to live a healthful life. One suspects that the interpretation of answers to our second health question, asking respondents to rate their health on a scale ranging from excellent to poor, is subject to many of the same problems.

Preliminary evidence suggests a strong relationship between labor force behavior and health. At first it appears intuitively obvious-- indeed trivial-- to point out that apparently unhealthy men participate in the labor force less than apparently healthy men. However, it is not obvious how health affects responses to changes in economic and other conditions, and this question is deserving of further investigation.

For instance, who are more likely to respond to changes in job opportunities--the healthy or the unhealthy? One's first answer may be that it is more likely to be the healthy members of the population who respond, since they are able to respond. However, response is a two-way street; since middle-class values dictate that adult males should work, the variability in labor force participation, weeks in the labor force, and hours worked is probably small among healthy men. Therefore, it may well be that it is the less healthy who leave the labor force when jobs are hard to find or are unattractive and who re-enter the labor force when conditions improve. The issue of the interaction of health with the effect of other variables on labor force behavior may be crucial to understanding why, for instance, the labor force participation of black males has declined considerably more than that of white males since World War II. That is, if one group of people has worse health than another, it is entirely plausible that the response to rising income levels of the less healthy group will be a greater reduction in labor force attachment than that of the healthy group. This possibility will be one of the focal points of future analysis. If such relationships appear in the data, it would be worthwhile to consider an intensive study of the health of a subset of respondents in a future survey, possibly making use of physicians in order to obtain more objective health measures.

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[4] William G. Bowen and T.A. Finegan, "Labor Force Participation and Unemployment," in Arthur M. Ross (ed.), Employment Policy and the Labor Market (Berkeley and Los Angeles: University of California Press, 1965).

Those men who rated their health as "poor" worked considerably fewer hours during the week prior to the survey than did others. Most of the discriminating power of the respondents' health ratings appears to be between the rating of "poor" on the one hand and the combined ratings of "excellent," "good," and "fair" on the other (Table 3.7). White respondents who rated their health as "poor" worked an average of 7.4 hours per week less than the mean number of hours worked by all whites; blacks with poor health worked 9.3 hours per week less than the mean of all blacks.

Table 3.7 Average Number of Hours Worked During the Survey Week, by Self-Rating of Health: Men 45-59 Years of Age who Worked During the Survey Week, by Color

Self-rating of health	WHITES		BLACKS	
	Total number (thousands)	Average number of hours worked in survey week	Total number (thousands)	Average number of hours worked in survey week
Excellent	4,333	47.9	406	42.9
Good	5,211	47.9	456	43.4
Fair	1,757	46.3	230	42.5
Poor	263	40.1	51	33.3
Total or average	12,017	47.5	1,184	42.6

The fraction of whites who were in the labor force 52 weeks in 1965 is greatest for those who claimed their health limited neither the kind nor amount of work they do (Table 3.8). Furthermore, about one-third of the white men and two-fifths of the blacks who were not in the labor force all 52 weeks in 1965 also declared that health problems currently imposed a limitation on either the kind or amount of work they can do. Among white men in white collar jobs, the difference in proportions in the labor force 52 weeks between those with a problem and those with no health problem is 11.4 percentage points; among blue collar workers, the difference is 14.3 percentage points; among service workers, the difference is 16.3 percentage points; and among farm workers it is 12.8 percentage points. Similar relationships exist according to the respondents' rating of health. Among blacks, the corresponding differences in the fractions of men in the labor force 52 weeks in 1965 are 8.5 percentage points for white collar workers, 24.2 percentage points for blue collar workers, 22.6 percentage points for service workers, and 17.8 percentage points for farm workers. The percentage point difference between the proportions of "healthy" and "unhealthy" men who experienced 52 weeks in the labor force in 1965 is greater among whites than among blacks for white collar workers; and greater among blacks for blue collar, service, and farm workers. Whether these inter-color differences in the effect of health are due to true disparities in response to health or are due to the variation between whites and blacks in the occupational mixes within the broad occupational groups is impossible to specify at this time.

Educational Attainment

Among whites, except for men in the service occupations, the proportion of workers in the labor force 52 weeks generally rises with educational level, except that men who had one or more years of college generally have a somewhat lower rate than the group which received 12 years of education (Table 3.9). Among blacks, the fraction of men who were in the labor force 52 weeks in 1965 also rises with the level of education; however, the small numbers involved in some years-of-schooling-occupation groups make generalizations difficult. For white collar and service workers, the fraction of respondents who experienced 52 weeks in the labor force in 1965 is somewhat lower for those who have 13 or more years of education than for those who have exactly 12 years. On the other hand, all occupations in the 12-years-of-schooling category have higher rates than those in the 9-11-years-of-schooling category.

Labor market participation during the survey week is positively associated with educational attainment, the only exceptions being that (1) among whites, the rates for men with eight years of schooling and 9-11 years are equal and (2) among blacks, the labor force participation rate of men with 13 or more years of schooling is 2.8 percentage points less than that of men with 12 years. Among whites, the difference between the labor force participation rates of men with 13 or more years of schooling

Table 3.8 Selected Measures of Labor Market Participation, by Effect of Health on Work and Type of Occupation: Men 45-59 Years of Age with Work Experience, by Color

Effect of health on work and type of occupation	WHITES			BLACKS		
	Total number (thousands)	Percent in labor force 52 weeks in 1965	Average number of weeks in labor force in 1965	Total number (thousands)	Percent in labor force 52 weeks in 1965	Average number of weeks in labor force in 1965
Limits kind or amount						
White collar	1,094	79.7	48.3	42	80.3	48.3
Blue collar	1,382	70.6	44.3	159	61.5	43.3
Service	227	73.3	45.0	52	67.7	42.7
Farm	397	76.4	46.9	54	65.0	44.0
Does not limit						
White collar	4,045	91.1	51.2	149	88.8	49.9
Blue collar	4,713	84.9	50.7	624	85.7	50.4
Service	446	89.6	50.7	145	90.3	51.0
Farm	725	89.2	50.6	85	82.8	50.1
Total (1)						
White collar	5,270	87.5	50.1	199	85.9	49.0
Blue collar	6,395	78.9	48.0	837	77.9	47.3
Service	738	81.2	47.3	208	81.7	47.4
Farm	1,164	83.1	48.7	149	73.6	46.2

(1) Total includes respondents who answered "Health prevents working."

Table 3.9 Selected
Type of Occupation: Men 45-59 Years of Age with Work Experience, by Color

Years of school completed and type of occupation	WHITES			BLACKS		
	Total number (thousands)	Percent in labor force 52 weeks in 1965	Labor force participation rate	Total number (thousands)	Percent in labor force 52 weeks in 1965	Labor force participation rate
7 or less						
White collar	302	86.2		28	80.4	
Blue collar	1,533	71.6		490	76.8	
Service	161	83.0		110	78.1	
Farm	360	73.0		120	72.9	
Total or average	2,365	73.9	88.5	755	76.2	87.7
8						
White collar	376	83.7		16	100.0	
Blue collar	1,572	75.6		106	81.3	
Service	151	80.7		25	73.7	
Farm	362	88.1		14	65.3	
Total or average	2,475	79.1	93.5	161	80.6	92.5
9-11						
White collar	909	86.2		37	82.6	
Blue collar	1,628	82.2		156	75.6	
Service	181	82.4		34	85.5	
Farm	175	83.5		4	82.7	
Total or average	2,897	83.6	93.5	232	78.4	94.4
12						
White collar	1,551	89.4		48	93.1	
Blue collar	1,341	86.3		70	83.7	
Service	173	75.3		30	97.0	
Farm	193	91.3		6	86.3	
Total or average	3,262	87.5	97.0	155	89.3	96.1
13 or more						
White collar	2,114	88.0		63	81.0	
Blue collar	279	81.9		15	84.7	
Service	60	91.6		8	81.5	
Farm	68	84.2		3	100.0	
Total or average	2,534	87.4	97.9	89	82.3	93.3
Total						
White collar	5,270	87.5		199	85.9	
Blue collar	6,395	78.9		837	77.9	
Service	738	81.2		208	81.7	
Farm	1,164	83.1		149	73.6	
Total or average	13,608	82.7	94.3	1,400	78.9	90.6

and those with less than eight years is 9.4 percentage points; among blacks, the difference is 5.6 percentage points.

Educational attainment not only reflects the average wage rate a worker can expect to receive, but it also reflects a host of factors including family background, income, and psychological characteristics which underlie it. Many of the characteristics associated with educational attainment--ambition, ability, etc.--are expected also to be positively correlated with labor force attachment. Furthermore, highly educated workers are probably found in jobs which typically offer relatively pleasant working conditions and other non-pecuniary employment benefits. This also should be a force contributing to a positive correlation between education and labor force attachment. However, to the extent that higher wage rates, ceteris paribus, reduce the amount of labor supplied by workers--and there is considerable evidence that they do--education and labor force attachment should be negatively correlated. The net effect of education on labor market participation is therefore probably less than the gross relationship described above would indicate.[5]

Wage Rate

Interest has long focused on the relationship between wage rates and measures of labor services offered. Our study bears out the results of much previous investigation--that a negative relationship exists between average weekly hours worked and hourly rate of pay (Table 3.10). A simple least-squares regression line was fitted to the data in that table.[6] For what they are worth, the results (the coefficients) imply that an increase in the rate of pay of $1.00 per hour is associated with a reduction of 1.6 hours in the workweek for whites and of 1.3 hours for blacks.[7] Needless

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[5] The results of multiple regression analysis in previous studies suggest that the net relationship between education and labor market attachment (holding wage rate and other variables constant) is positive. See Bowen and Finegan, op.cit., pp. 115-61.

[6] The regression line was fitted to the midpoints of each of the wage rate groups $1.25-1.49 to $5.00-5.99 and the corresponding mean hours worked. The observations were not weighted by the number of members of each wage category. For whites the equation is H.=49.8-1.6 W., and for blacks it is H.=48.3-1.3 W. (H. is hours worked per week and W. is the hourly wage rate).

[7] This some regression analysis also was performed using industry-group data and the occupation-group data. For whites, using industry-group data, the equation was H.=73.5-7.5 W., for occupation-group data, the equation was H.=44.3-.65 W.

Table 3.10 Measures of Labor Market Participation, by Hourly Rate of Pay: Wage and Salary Workers 45-59 Years of Age, by Color

Hourly rate of pay	Total number with work experience (thousands)	Percent in labor force 52 weeks in 1965	Average number of weeks in labor force in 1965	Total number working in survey week (thousands)	Average number of hours worked in survey week
	WHITES				
Less than $1.25	478	66.3	43.7	376	51.9
$1.25-1.49	407	68.6	44.4	298	46.9
$1.50-1.99	925	75.6	46.5	766	48.2
$2.00-2.49	1,348	81.8	48.4	1,155	45.6
$2.50-2.99	1,654	80.6	49.1	1,439	44.8
$3.00-3.49	1,740	85.1	50.3	1,559	44.1
$3.50-3.99	1,116	81.5	50.1	1,023	44.1
$4.00-4.99	1,283	84.9	50.4	1,145	43.0
$5.00-5.99	706	82.9	50.5	649	40.3
$6.00 or more	729	92.7	51.1	680	42.2
Total(1) or average	10,742	81.3	49.0	9,376	44.7
	BLACKS				
Less than $1.25	194	67.5	44.5	149	44.6
$1.25-149	179	75.4	47.6	149	41.6
$1.50-1.99	202	75.7	46.9	166	42.4
$2.00-2.49	165	82.4	49.1	142	42.6
$2.50-2.99	192	81.8	49.6	174	40.8
$3.00-3.49	144	78.5	48.5	128	41.4
$3.50-3.99	56	80.4	48.3	49	41.0
$4.00-4.99	40	92.5	51.1	33	39.5
$5.00-5.99	17	82.4	44.1	13	38.2
$6.00 or more	10	70.0	40.5	4	40.9
Total(1) or average	1,244	76.7	47.4	1,039	41.9

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(1) Excludes operators of small incorporated family enterprises.

to say, rate of pay is correlated with many other variables that exert their own influences on hours of work, such as industriousness, education, nonlabor income, and health, and these variables have been omitted from the analysis of the data in Table 3.10. Such variables no doubt will help explain why, in the top wage rate category, the mean number of hours for both whites and blacks tends to rise.[8]

The same relationship with rate of pay is not found for weeks in the labor force in 1965. This measure shows a positive association with rate of pay. Among whites, the difference in the proportion of workers who were in the labor force for 52 weeks between those who earned $6.00 or more per hour and those who earned less than $2.00 per hour is 20.9 percentage points (Table 3.10). The mean number of weeks rises as the hourly rate of pay increases the difference between men who averaged $6.00 or more per hour and those who averaged less than $2.00 per hour being 5.8 weeks. Among blacks, the average number of weeks in the labor force is very low for those who averaged more than $5.00 per hour; however, these men constitute only 2.2 percent of the total number of blacks. For wage rates of less than $5.00 there is a rather clear tendency for weeks in the labor force to fall with declining wage rates, the difference in the means between men earning from $4.00 to $4.99 and those earning less than $2.00 being at least three-and-one-half weeks.

The negative relationship between rate of pay and hours worked per week is not necessarily inconsistent with the positive relationship between rate of pay and weeks in the labor force. The requirements of most jobs held in today's economy preclude, by and large, large gaps in attention to one's work. On the other hand, reduction in labor services offered can probably be achieved without disrupting production in most lines of work by gradual reduction of weekly hours. The reduction in the length of the average workweek has certainly been a more important aspect of secular changes in labor services offered than has the reduction of weeks per year in the labor force.[9]

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[8] Evidence that omitted variables can help explain the tendency for hours worked to lie above the regression line at high wage rates is found in Chapter 7. There it is found that job satisfaction increases with wage rate.

[9] Components of Increase in Leisure Time, Circa 1945-1960

Components		Hours per Year per Fullt[illegible]mployed Person*
1 1/2 hours less in the work week		75
Average number of vacation weeks per employed person		20
Number of holidays per year		0
	TOTAL	95

* All persons 14 years of age and older.

Source: "Recent Growth of Paid Leisure for U.S. Workers," Peter Henle, Monthly Labor Review, (March, 1962), p. 256.

As the table above shows, since about 1945, the reduction in the length of the average workweek has contributed almost 80 percent of the total decline in average number of hours worked per year. (Note that we do not refer here to paid reductions in hours only, but to all reductions).

Most likely, the observed positive correlation between the wage rate categories and weeks in the labor force is due to a correlation between the wage rate and other variables influencing the number of weeks. For instance, one factor which probably contributes to the productivity of a worker in most employments is the probability that he can be available for work without periodic interruptions due to bad health, temporary withdrawal from the labor force for non-health reasons, and so on. Another factor is the probable correlation between characteristics contributing to high earning power such as education, training, and effort that are also correlated with labor force attachment. That is, persons who for unspecified reasons have relatively strong tendencies to work also are likely to be those who acquire relatively large amounts of education and other forms of preparation for productive market work. It seems likely that these various characteristics will influence the uniformity of work throughout the year, even if desired weekly hours decline with increases in wage rate. That is to say, men who are work-(or labor-market) oriented will tend to be more productive and more reliable workers than other men, *ceteris paribus*. Given the likely requirements of most jobs for *steady* work, "good" workers will tend to have the characteristics of stability and reliability. Nevertheless, such workers may be expected to respond in their desired amount of work to their wage and income levels. In the presence of employers' preferences for steady work, workers will find it easier to reduce hours worked per week rather than weeks per year, and the more desirable workers will tend to fit this pattern more closely than will others. Thus, it is not perplexing to observe simultaneously a *positive* relationship of hourly rate of pay with weeks in the labor force, *but* a negative relationship with hours worked per week.

Family Financial Resources Other Than Respondent's Earning Power

The financial resources of a family, other than the earning power of the principal breadwinner, generally consist of the earning power of other family members; non-human assets; and public assistance, unemployment compensation, and other forms of social welfare payments. A priori, one expects these human and non-human resources to reduce the labor force attachment of the family members, in general, but this effect should be greatest among the family members whose attachment to the labor force is weakest, rather than among prime earners. Such family members would be children, wives, the elderly, and men or women in poor health. On the other hand, in those families where there is relatively high earning power among members other than the male head, there may well be a tendency to increase the labor force attachment of such members relative to the attachment of the family heads. Given these considerations, we might expect to find a negative relationship between financial resources other than respondent's earning power and the measures of labor force attachment observed. Such a relationship, however, may be obscured by positive relationships between these financial resources and variables such as the prime earner's employment experience, health, and attitudes toward work which influence labor force behavior in a direction opposite to that expected of financial resources. Indeed, any influences on labor force attachment that are ignored in our analysis will influence family financial resources through accumulated savings in a way that may make the evaluation of the net influence of financial resources on labor force attachment quite difficult. That is to say, the simple distribution of assets we observe is a reflection of the distribution of earning power and labor market experience among the men studied, because high earning power and high earnings facilitate the accumulation of family assets. While the accumulation of assets probably affects subsequent labor market participation, there is no doubt a correlation over time in labor market experience which may obscure in a simple relationship the net effect of assets on participation.

The simple relationship observed in our tabular data probably reflects the influence of labor market participation on family net assets, rather than the reverse. Among both whites and blacks, the average number of weeks in the labor force in 1965 rises with increases in net family assets (Table 3.11). The average number of weeks in the labor force during 1965 for whites whose net family assets were $15,000 and over is 4.6 weeks more than that for whites with less than $500 in net family assets. Among blacks, the comparable figure is 4.7 weeks. Among whites, the fraction of respondents who experienced 52 weeks in the labor force in 1965 is 12.7 percentage points greater among those whose assets were $15,000 and over than among those whose assets were under $500. Among blacks, the comparable figure is 17.2 percentage points.

The relationship between net family assets and labor force participation during the survey week is similar to that between assets and weeks in the labor force during 1965. Among whites, the labor force participation rate during the survey week for men whose net family assets were $15,000 or more is 11.9 percentage points greater than for men whose assets were $499 or less. Among blacks, the difference between the comparable groups is 14.7 percentage points.

The relationship between labor force participation during the survey week and family income in 1965, excluding the respondent's earnings, reflects not only the influence of net asset position and the earning power of other family members (particularly respondent's wife), but also in many cases, the substitution of the work of other family members for that of the respondent. Thus, the simple relationship observed in Table 3.12 reflects the confounding influence of omitted variables such as health and local labor market conditions. Among both whites and blacks, labor force participation is negatively associated with this family income variable, going from the lowest income category (0-$999) to the middle category ($2,000-$2,999). The difference between the participation rates of respondents in the lowest and middle categories is 7.9 percentage points among whites and 20.7 percentage points among blacks. Between the middle income category and the highest income category ($5,000 and over), the labor force participation and the family income variable are positively associated. The difference between the participation rates of respondents in the middle and the highest income categories is 4.5 percentage points among whites and 12.6 percentage points among blacks.

Table 3.11 Selected Measures of Labor Market Participation, by Total Family Net Assets: Men 45-59 Years of Age with Work Experience, by Color

Total family net assets	WHITES				BLACKS			
	Total number (thousands)	Labor force participation rate	Percent in labor force 52 weeks in 1965	Average number of weeks in labor force in 1965	Total number (thousands)	Labor force participation rate	Percent in labor force 52 weeks in 1965	Average number of weeks in labor force in 1965
Less than $ 500	849	85.1	74.1	45.5	291	81.9	70.9	44.6
$500-4,999	1,358	91.7	80.7	48.2	221	91.9	81.9	47.7
$5,000-14,999	2,819	95.7	84.5	49.5	259	94.6	82.7	48.6
$15,000 or more	4,111	97.0	86.8	50.1	117	96.6	88.1	49.3
Total or average	13,608	94.3	82.7	48.8	1,400	90.6	78.9	47.4

Table 3.12 Labor Force Participation Rates, by Family Income in 1965 Excluding Respondent's Earnings. Men 45-59 Years of Age with Work Experience, by Color

Family income in 1965 excluding respondent's income	WHITES		BLACKS	
	Total number (thousands)	Labor force participation rate	Total number (thousands)	Labor force participation rate
Less than $1,000	4,697	97.0	631	96.9
$1,000-1,999	1,462	90.1	151	80.8
$2,000-2,999	996	89.1	101	76.2
$3,000-4,999	1,657	94.3	116	87.9
$5,000 or more	1,663	93.6	89	88.8
Total or average	13,608	94.3	1,400	90.6

One suspects that the relationships observed between labor force participation and the family income variable reflect a complex interaction between substitution of other family members' earnings for those of male respondents in the lower income categories; and a positive correlation between labor force participation and the earning power of the men, the earning power of other family members, and non-labor income among those in the higher income categories. That is, in the lower income categories it seems likely that the earnings of other family members are necessary to support minimum consumption in families where the earning power of the head is low due to lack of education, poor health, and choronic unemployment. On the other hand, high income families are much more likely to contain supplementary earners who are attracted to the labor force because of favorable attitudes toward market work, high educational attainment, and high earning power. However, this is a subject that clearly needs more investigation at a time when more variables and observations can be used.

PSU Unemployment Rate in 1960

At the time of writing this report, the most important variable at our disposal which pertains to the labor demand conditions of the labor markets in which the respondents were located is the 1960 unemployment rate in the PSU. We believe that the rank ordering of the PSU's by their unemployment rates in 1960 and 1965 are sufficiently similar to justify using the 1960 rate. Eventually, we will be able to make the analysis on the basis of 1967 unemployment figures.

Among whites, average weekly hours worked is negatively related to PSU unemployment rate (Table 3.13). In PSU's where the unemployment rate was greater than 6.2 percent, average hours worked per week was 1.8 hours less than in PSU's where the unemployment rate was less than 4.2 percent. The relationship among blacks is just the opposite, however, with average weekly hours worked being 3.8 hours greater in the PSU's with the highest unemployment than in those with the lowest unemployment.

The average number of weeks in the labor force in 1965 is negatively related to unemployment in the PSU. Among whites, the average number of weeks in the labor force in 1965 was 0.9 weeks smaller in PSU's where the unemployment rate was over 6.2 percent than in PSU's where it was less than 4.2 percent. The proportion of men who experienced 52 weeks in the labor force in 1965 was 4.3 percentage points less in the PSU's averaging the highest unemployment rates than in the PSU's where unemployment was lowest. Among blacks, the average number of weeks in the labor force in 1965 was 0.8 weeks lower in PSU's where the unemployment rate averaged more than 6.2 percent than in those where it averaged less than 4.2 percent (although it was lowest in the 4.2-6.2 percent category). The proportion of blacks who experienced 52 weeks in the labor force in 1965

Table 3.13 Selected Measures of Labor Market Participation, by 1960 Unemployment Level in PSU: Men 45-59 Years of Age, by Color

1960 unemployment level in PSU	Total number with work experience (thousands)	Labor force participation rate	Percent in labor force 52 weeks in 1965	Average number of weeks in labor force in 1965	Total number working in survey week	Average number of hours worked in survey week
	WHITES					
Less than 4.2 percent	3,195	95.2	84.5	49.0	2,815	49.3
4.2-6.2 percent	7,792	94.2	83.0	49.0	6,926	46.8
6.2 percent or more	2,621	93.1	80.2	48.1	2,275	47.5
Total or average	13,608	94.3	82.7	48.8	12,017	47.5
	BLACKS					
Less than 4.2 percent	361	91.5	83.9	48.2	322	41.2
4.2-6.2 percent	829	89.7	77.6	47.0	686	42.7
6.2 percent or more	209	90.5	75.4	47.4	176	45.0
Total or average	1,400	90.6	78.9	47.4	1,184	42.6

was 8.5 percentage points less in the highest-unemployment PSU's than in the lowest-unemployment PSU's.

Labor force participation during the survey week is similarly higher in the PSU's in the lowest unemployment category. Among whites, the labor force participation rate in the PSU's which averaged more than 6.2 percent unemployment in 1960 is 2.1 percentage points lower than in PSU's where the unemployment rate was less than 4.2 percent. Among blacks, the labor force participation rate in PSU's in the highest unemployment category is 1 percentage point less than in the lowest category, although it is 0.8 percentage points higher than in the intermediate category of PSU's.

Motivation to Work

Among the attitudinal questions included in the initial survey was one which asked respondents to indicate whether good wages or liking the work was more important to them in considering the merits of a job (Table 3.14). Among whites (except farmers), those who said that good wages are more important were more likely to have been in the labor force 52 weeks in 1965 than those who said that liking the work is more important. The difference varies by type of occupation, being greatest for white collar workers, next largest for service workers, and smallest for blue collar workers. A possible interpretation of the higher labor market attachment of men who cited good wages is that working is the major way these men can satisfy the achievement of an earnings goal. On the other hand, for those who think that "kind or work" is more important than "pay," non-labor-market activities may, on many occasions, provide more satisfaction than working for pay. However, smaller proportions of the blacks who replied that good pay is more important worked 52 weeks in 1965, so any interpretation of the relationship between the answers to the question about the more important aspect of a job and 1965 weeks in the labor force must be considered highly tentative.

II.

Potential Labor Force Members

So far in this chapter we have concerned ourselves with analyzing the factors associated with three different measures of labor market participation. We turn now to a brief examination of men classified as out of the labor force, in order to ascertain the likelihood of their re-entry into the labor market. In addition, we compare their characteristics to those of men who are currently unemployed.

Two questions in the interview schedule are related to the men's plans for, or attitudes toward, taking a job. One of these asked whether

Table 3.14 Selected Measures of Labor Market Participation, by Motivation to Work and Type of Occupation: Men 45-59 Years of Age with Work Experience, by Color

Motivation to work and type of occupation	WHITES			BLACKS		
	Total number (thousands)	Percent in labor force 52 weeks in 1965	Average number of weeks in labor force in 1965	Total number (thousands)	Percent in labor force 52 weeks in 1965	Average number of weeks in labor force in 1965
Good wages						
White collar	711	93.0	50.6	53	80.9	48.4
Blue collar	1,446	81.6	49.0	416	77.5	47.0
Service	156	86.4	48.8	79	79.6	47.7
Farm	208	82.0	47.8	90	72.0	46.7
Liking the work						
White collar	4,354	87.4	50.4	136	88.1	49.2
Blue collar	4,715	78.6	47.8	371	80.2	48.1
Service	525	80.8	47.3	116	83.8	48.0
Farm	900	84.4	49.3	50	75.5	45.7
Total or average						
White collar	5,270	87.5	50.1	199	85.9	49.0
Blue collar	6,395	78.9	48.0	837	77.9	47.3
Service	738	81.2	47.3	208	81.7	47.4
Farm	1,164	83.1	48.7	149	73.6	46.2

the individual planned to seek employment within the next 12 months. The other inquired whether he would take a job if offered one. Of the total of 912,000 men not in the labor force, about 8 percent expressed a definite intention to seek work within the year. Of these, three-fifths attributed their failure to be looking for work currently to poor health or physical condition. The proportion of men indicating without qualification that they would accept a job if offered one is almost three times as large as the proportion with current plans to seek work (i.e., 22 percent).[10]

If one assumes that those who say that they would be receptive to a job offer are potential manpower resources, it is interesting to inquire in what respects these "potentially available" men differ, on the one hand, from the much larger number of those outside the labor force who indicate no willingness to seek work and, on the other, from those who are actually seeking work (i.e., the unemployed). In other words, it is possible to classify all those who are not currently employed along a continuum of apparent availability: those actively seeking work; those not seeking, but who indicate an unqualified willingness to take a job if offered one; those who might take a job offer under certain conditions; and those who say that they would not accept a job even if offered one. Such a classification is shown in Table 3.15. It is interesting that in the case of both whites and blacks, the number of men out of the labor force who say, without reservation, that they would accept a job offer is almost exactly as large as the number who are unemployed according to the official definition. In each case, the number who say that they would take a job under certain conditions is somewhat smaller. As proportions of the total number out of the labor force, these categories are virtually identical for white men and black men.

Table 3.15 Relative Availability for Work: Men 45-59 Years of Age with Work Experience, by Color
(Thousands)

Relative availability for work	WHITES	BLACKS	TOTAL
Employed	12,655	1,240	13,895
Unemployed	171	29	200
Out of labor force	782	131	912
Would accept a job with no qualifications	175	28	203
Would accept a job with qualifications	116	17	132
Would not accept a job	409	74	483
Total	13,608	1,400	14,095

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[10] The hypothetical job offer question was asked later in the interview than the question on job seeking intentions. The overwhelming majority of those responding affirmatively to the first question also replied affirmatively to the second. The few exceptions are not necessarily evidence of inconsistencies. A man recovering from surgery, for example, may not be in a position to accept a job at the moment, despite his intention to seek one in several months.

The very small numbers of sample cases involved make it hazardous to compare the characteristics of the several categories of men shown in the table. Nevetheless, a limited number of such comparisons are presented in Table 3.16 for blacks and whites combined, which suggest very clear differences among the several groups. First of all, those out of the labor force who indicate an unqualified availability for work are much less likely than other men out of the labor force to have serious health problems. Only about a third of the men who are available without qualification, compared with two-thirds of the other men who are out of the labor force, reported health problems that "prevented their working." Seventeen percent of the men available without qualification, in contrast to 7 percent of the others, reported no health problem limiting work in any way. It is interesting that those who indicate a qualified willingness to accept a job offer are indistinguishable from those who state flatly that they would not accept a job. While the men who indicate an availability for work appear to be more readily employable, on the average, than those who do not so indicate, they appear to be less readily employable than those who are actually seeking work (i.e., the currently unemployed). Of the currently unemployed, 60 percent claim to be free of health problems that limit work, as compared with 17 percent of the men currently not in the labor force who are willing to accept a job offer without qualification.[11] As should be expected, the analogous comparison between those men indicating an unqualified availability for work and employed men shows an even greater disparity in employability.

Virtually the same relationships among the several groups prevail when one looks at the recency of their employment experience. Those who respond affirmatively without qualification to a job offer are far more likely than other men out of the labor force to have worked within the past two years. They are also far less likely not to have had any work experience in the past five years.

Two conclusions appear to be warranted from this brief analysis. First, there is some evidence of the realism of responses to hypothetical questions. The difference in health between those who indicated that they would take a job and those who either imposed conditions or responded that they would not suggests that the men, by and large, were mindful of their capacity for labor market participation when answering.[12] In analyzing the data from the 1967

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[11] Men who were seeking work at the time of the survey were not asked whether health or physical condition prevented them from working.

[12] There is no necessary inconsistency in the fact that as many as a third of those who said that they would take a job if offered one reported a health problem or physical condition that prevented them from working. Inability to work is by no means a perfectly objectifiable concept. It is conceivable that some men with disabilities who are out of the labor force explain their labor force status by saying that they are unable to work, without meaning literally that they cannot work. It is also possible that a man's perception of the marketability of his skills (physical and mental) is narrower than their true marketability. This could lead him to claim, in all honesty, that his physical condition prevented his working, when in fact, he was employable.

Table 3.16 Relative Availability for Work, by Selected Characteristics: Men 45-59 Years of Age

(Percentage distribution)

Selected Characteristics	In labor force		Out of labor force			
	Employed	Unemployed	Indicated an unqualified willingness to take a job	Indicated a qualified willingness to take a job	Would not accept a job	Total
Effect of health on work						
Prevents	0	0(1)	36	66	68	59
Limits kind or amount	22	40	47	28	25	32
Does not limit	78	60	17	7	7	9
Total percent	100	100	100	100	100	100
Total number (thousands)	13,895	200	203	132	483	912
Date last worked						
1966	100	(2)	26	7	6	11
1965	0	(2)	27	23	17	21
1963-1964	0	(2)	16	24	28	24
1961-1962	0	(2)	12	20	8	10
Before 1961	0	(2)	18	26	42	33
Total percent	100		100	100	100	100
Total number (thousands)	13,895		203	132	483	912

(1) Men who were seeking work at the time of the survey were not asked whether health or physical condition prevented their working.

(2) Not available.

follow-up survey, it will be of interest to ascertain whether those who indicated in 1966 that they would accept a job offer are more likely to have entered the labor force during the year than those who did not indicate availability.

Second, there is nevertheless reasons to question the degree to which men aged 45-59 who are out of the labor force constitute a reliable reserve of human resources. If there were a general increase in the demand for labor, it seems not unlikely that the labor force participation rate of whites and blacks in this age cohort could rise by about 1 percentage point. However, the characteristics of the "potentially available" (such as their generally poorer health) indicate that their possible attachment to the labor force, or at least to employment, would be weak. Futhermore, there is the problem that the skills of men out of the labor force have probably deteriorated through non-use. Thus, to whom the majority of men out of the labor force would be attractive employees is questionable.

III.

Summary and Conclusions

Perhaps the most consistent feature of the relationships we observe in our cross-classifications of the survey data is that it is often possible to account for inter-color differences in labor market participation--particularly labor force participation during the survey week and measures of weeks in the labor force during 1965--by means of variables which may reasonably be thought to influence labor market participation. Some of these are: (1) health, (2) marital status, (3) the actual unemployment experience of the labor force members, (4) educational attainment, and (5) financial characteristics. However, these variables affect labor market participation, and to some extent each other, simultaneously; therefore at present it is impossible to ascertain their net effects on labor market behavior. An interesting subject for further investigation is the extent to which the inter-color difference in the relationship between age and labor force participation is due to inter-color differences, by age, in occupation, health, economic circumstances, and interactions among these variables.

We have found on the basis of relatively simple analysis of two-, three-, and four-way classifications of the data that labor market participation is related to marital status, family size, unemployment experience, present and past wage rates, other family financial characteristics, education, age, and health in ways that are, by and large, consistent with a priori expectations based on economic theory, the results of past studies, and speculation about interdependence among the many variables examined.

For further investigation four of the most important and interesting tasks will be: (1) to investigate the role of health in explaining inter-color differences in labor supply behavior, especially as health interacts with, and is to an important extent, determined by occupational status and financial circumstances; (2) to investigate the role of such financial characteristics as the earning power of prime and supplementary earners and non-labor sources of family income, and to attempt to separate the effect of financial influences on behavior from the effects of education, training, health, and other variables which are important determinants both of financial and labor force characteristics; (3) to investigate the role of attitudinal characteristics on labor supply behavior and on variables thought to determine labor force behavior; (4) to investigate the role which unemployment plays in determining withdrawal from the labor force; it will be extremely important to attempt to separate the effect on labor force attachment of the two principal determinants of unemployment: (a) overall labor market conditions, and (b) the response to these conditions generated by individual characteristics such as health, financial characteristics, education and occupation, and attitudinal or psychological characteristics; and (5) to continue our attempt to determine the characteristics which discriminate among different categories of men out of the labor force, in order to see if we can specify which of these men are more likely than others to re-enter the labor force, and under which circumstances re-entry is most likely to take place. One is optimistic on the bais of the preliminary investigation that subsequent intensive analysis of the data will enable us to advance substantially our understanding of the determinants of decisions regarding labor market participation.

Chapter 4*

INCIDENCE OF UNEMPLOYMENT

In this chapter we search for the determinants of unemployment among males aged 45-59, devoting particular attention to those factors explaining the difference in the incidence of unemployment between white and black men. Among several alternative measures of unemployment we shall concentrate our discussion on two. The first is the proportion of the labor force unemployed during the survey week and the second is the mean number of weeks these older males were unemployed in the calendar year prior to the survey (1965). However, sometimes it will be necessary to use other unemployment measures, such as number of spells of unemployment in 1965 and/or duration of unemployment, in order to obtain a clearer picture of the incidence of unemployment and its causes.

There were 171,000 whites and 29,000 blacks unemployed during the survey week. The unemployment rate was 1.3 percent for whites, and 2.3 percent for blacks; the difference between these two unemployment rates appears to be significant at the 10 percent level. For the calendar year 1965, the average number of weeks of unemployment reported by white men was 1.1, compared with 2.7 for blacks; this difference appears to be significant at the 5 percent level.

Owing to the fact that the unemployed are represented by relatively few observations in our sample--about 43 whites and 29 blacks--our analysis is somewhat restricted. The small sample severely limits our ability to control for particular characteristics while seeking the effect of a variable upon the incidence of unemployment. Consequently, we sometimes are unable to be certain that an observed relationship is independent of the influence of other variables, i.e., deserves attention as a fundamental causal association.

Basic Correlates of Unemployment

Color

Black men aged 45-59 experienced significantly more unemployment than whites, regardless of the unemployment measure. During the survey week, the unemployment rate of blacks was 1 percentage point greater than that of whites. During 1965, blacks were unemployed an average of 1.6 weeks more than whites. Furthermore, the proportion of men with work experience who had three or more spells of unemployment in 1965 was 4.6 percent among blacks, and only 1.6 percent among whites (Table 4.1).

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* This chapter was written by Belton M. Fleisher and Karl A. Egge.

By both of our measures, unemployment was lower among white collar workers than among men in the other three types of occupations. Since 40 percent of the whites, compared to only 15 percent of the blacks, were white collar workers (Table 4.2), standardizing the unemployment rates of blacks by the occupational distribution of whites reduces the inter-color difference in unemployment rates substantially.[1] Similarly, there is a sizable reduction in the inter-color difference in weeks of unemployment experience in 1965 when the values for blacks are weighted by the occupational distribution of whites.

Characteristics of Most Recent Job

Occupation As might have been expected, men in jobs which are lower on the occupational ladder (e.g., laborers, service workers) experienced both higher average number of weeks of unemployment and higher unemployment rates than did men in more skilled occupations(e.g., professional, technical, managerial). In general, white collar workers suffered less unemployment than did blue collar workers among both blacks and whites (Table 4.2). These occupational patterns are entirely consistent with those of the male labor force in general.

Industry For both whites and blacks the greatest amount of unemployment in the major industries was among workers in the construction industry. The unemployment rates for this industry were 3.3 percent for whites and 4.8 percent for blacks, more than twice as large as for all industries combined (Table 4.3). During 1965, whites in this industry experienced an average of three weeks of unemployment, and blacks 6.8 weeks of unemployment--much higher than the average unemployment for all whites and for all blacks.

Length of service Among those unemployed at the time of the survey, the duration of the current spell of unemployment is positively related to length of service on previous job (Table 4.4). About 60 percent of the whites and 68 percent of the blacks who had been unemployed for 1-4 weeks had less than one year of service with their last employer, but only 13 percent and 16 percent, respectively, had ten or more years of

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[1] The standardization procedure assists in underscoring the significant role of occupation and related variables in helping to understand inter-color differences in unemployment. For a discussion of this standardizing method see Appendix E.

Table 4.1 Unemployment Measures: Men 45-59 Years of Age with Work Experience, by Color

Unemployment measure	WHITES	BLACKS
Survey week unemployment		
Number in labor force (thousands)	12,826	1,269
Number unemployed (thousands)	171	29
Unemployment rate (percent)	1.3	2.3
Unemployment rate standardized by occupational mix of other color (percent)	2.0	1.8
Duration of unemployment (Percentage distribution)		
Less than 5 weeks	32.2	20.7
5-14 weeks	18.7	27.6
15 or more weeks	22.8	27.6
Not ascertained	26.3	24.1
Total percent	100.0	100.0
Number of weeks unemployed in 1965		
Number of men with work experience	13,608	1,400
Average duration of unemployment (weeks)	1.1	2.7
Average duration of unemployment standardized by occupational mix of other color (weeks)	1.7	1.8
Duration of unemployment (Percentage distribution)		
0 weeks	88.5	79.2
1-14 weeks	5.9	9.5
15 or more weeks	3.0	7.1
Not ascertained	2.6	4.2
Total percent	100.0	100.0
Spells of unemployment in 1965		
Number of men with work experience in 1965	13,040	1,294
Proportion of men who had at least:		
1 spell of unemployment	8.4	16.5
3 or more spells of unemployment	1.6	4.6

Table 4.2 Survey-Week Unemployment Rate and Unemployment Experience in 1965, by Major Occupation Group: Men 45-59 Years of Age , by Color

Major occupation group	WHITES				BLACKS			
	Survey week		1965		Survey week		1965	
	Total number in labor force (thousands)	Percent unemployed	Total number with work experience (thousands)	Average number of weeks unemployed	Total number in labor force (thousands)	Percent unemployed	Total number with work experience	Average number of weeks unemployed
White collar	5,092	0.5	5,270	0.4	191	1.0	199	0.5
Professional and technical	1,439	0.0	1,492	0.2	57	0.0	58	0.7
Nonfarm managers and proprietors	2,280	0.7	2,347	0.4	55	1.8	57	1.0
Clerical	685	1.0	727	0.6	60	1.7	65	0.1
Sales	688	0.6	704	0.6	19	0.0	19	0.0
Blue collar	5,939	1.9	6,395	1.7	756	2.4	837	3.2
Craftsmen and foremen	3,167	1.5	3,334	1.4	166	2.4	177	2.1
Operatives	2,209	1.8	2,418	1.9	344	2.9	376	2.6
Nonfarm laborers	564	3.7	642	2.8	246	1.6	284	4.7
Service	657	2.0	738	1.3	182	3.3	208	2.8
Farmers and farm managers	893	0.4	915	0.2	60	0.0	61	1.3
Farm laborers	211	1.6	249	2.0	75	2.7	89	4.1
Total or average	12,826	1.3	13,608	1.1	1,269	2.3	1,400	2.7

Table 4.3 Survey-Week Unemployment Rate and Unemployment Experience in 1965, by Major Industry Division: Men 45-59 Years of Age, by Color

Major industry division	WHITES				BLACKS			
	Survey week		1965		Survey week		1965	
	Total number in labor force (thousands)	Percent unemployed	Total number with work experience (thousands)	Average number of weeks unemployed	Total number in labor force (thousands)	Percent unemployed	Total number with work experience (thousands)	Average number of weeks unemployed
Agriculture	1,125	0.6	1,195	0.6	146	2.1	161	3.2
Mining, forestry, fisheries	151	4.6	176	2.2	15	13.3	17	0.1
Construction	1,380	3.3	1,515	3.0	165	4.8	182	6.8
Manufacturing	3,826	1.2	4,064	1.0	358	2.0	390	2.9
Transportation and public utilities	1,210	1.0	1,293	0.6	132	0.8	144	1.5
Wholesale and retail trade	2,011	1.2	2,085	0.9	134	3.7	157	1.3
Finance, insurance and real estate	507	0.0	528	0.2	38	0.0	43	0.9
Service	1,639	1.3	1,763	1.1	187	1.6	207	2.2
Public administration	926	0.8	975	0.8	93	1.1	96	0.5
Total or average	12,826	1.3	13,608	1.1	1,269	2.3	1,400	2.7

service. On the other hand, among men who had been unemployed 15 weeks or more, none of the whites and only 14 percent of the blacks had less than one year of service on their last jobs. What these figures may indicate is that long-service workers on layoff are more likely than those with shorter service to await recall rather than accepting other work. Those with longer periods of service probably have seniority status and/or types of fringe benefits which they would lose if they did not return to work with their former employer. Furthermore, quite independent of formal seniority provisions, men who have been on the same job for a long time are more likely than others to have acquired a knowledge of their work and working conditions which make them more valuable to their employers and their jobs more valuable to them. That is, the reservation wage rates of long-service unemployed men are likely to be higher, ceteris paribus, than those of other men. Another condition which may contribute to the long duration of unemployment among men who spent a long time on their most recent job is that the job-searching skills of these men probably have deteriorated more than those of men with less service, since the latter were active in seeking employment more recently.

Table 4.4 Number of Weeks Unemployed, by Length of Service on Last Job: Unemployed Men 45-59 Years of Age, by Color

(Percentage distribution)

Length of service on last job (years)	WHITES				BLACKS			
	1-4	5-14	15 or more	Total	1-4	5-14	15 or more	Total
Less than 1	60	47	0	45	68	20	14	35
1-9	27	37	33	29	16	20	43	30
10 or more	13	16	67	26	16	60	43	35
Total percent	100	100	100	100	100	100	100	100
Total number (thousands)	55	32	39	171	6	8	8	29

Class of worker Among both blacks and whites, government employees experienced less unemployment in 1965 than did employees in the private sector (Table 4.5). In addition, it is clear that blacks experienced more unemployment, irrespective of the class of worker, than did whites; the most pronounced inter-color difference existing in private wage and salary positions. These two facts considered together suggest that black men enjoy a comparative advantage in public employment, so far as job security is concerned.[2]

Table 4.5 Unemployment Experience in 1965, by Class of Worker: Men 45-59 Years of Age with Work Experience, by Color

Class of worker	WHITES		BLACKS	
	Total number (thousands)	Average number of weeks unemployed	Total number (thousands)	Average number of weeks unemployed
Wage and salary				
Government	1,872	0.7	247	1.2
Private	9,060	1.4	999	3.4
Self-employed	2,657	0.6	153	1.3
Total (1) or average	13,608	1.1	1,400	2.7

(1) Includes 12,000 white unpaid family workers.

Wage rate Among both white and black men, the number of weeks unemployed in 1965 is negatively related to the average wage rate on the current or last job, with the glaring exception of the wage category $5.00 or more, particularly for blacks (Table 4.6). The latter result is most probably an overestimate resulting from an extremely small sample size. For wage rate categories below $5.00 per hour there is a clear negative relationship among blacks between unemployment experience in 1965 and the wage rate. Due to the high correlation between wage rate and educational and/or occupational levels, the observed association between wage rates and unemployment may well be simply a reflection of the negative relation between occupational level and unemployment noted above.

White men employed as wage and salary workers earned an average wage of $3.51 per hour and their black counterparts earned $2.22 per hour. *Unemployed* whites whose previous jobs were as wage and salary workers earned approximately $3.00 per hour, and unemployed blacks earned almost $2.70 per hour.[3] Thus, despite the general negative association between unemployment and the wage rate, unemployed blacks earned nearly $.50 more per hour on their last jobs than do currently employed blacks.[4] The results of a simple standardization procedure imply that unemployed blacks earned more, on the average, than blacks currently employed in the same major occupations as those held by unemployed blacks in their former employment. We are not yet in a position to explain the net relationship between wage rates and unemployment experience, and recognize the possibility that, because of the small number of unemployed men, the wage rate difference between employed and unemployed blacks could be due to chance.

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[2] See also Chapter 5, p. 144.

[3] The average wage rates were computed from a frequency distribution of data not shown here.

Table 4.6 Unemployment Experience in 1965, by Hourly Rate of Pay: Wage and Salary Workers 45-59 Years of Age, by Color

Hourly rate of pay	WHITES		BLACKS	
	Total number (thousands)	Average number of weeks unemployed in 1965	Total number (thousands)	Average number of weeks unemployed in 1965
Less than $1.50	885	3.2	373	3.2
$1.50-1.99	925	2.1	202	3.0
$2.00-2.99	3,003	1.1	357	2.6
$3.00-4.99	4,139	0.8	240	1.9
$5.00 or more	1,435	1.4	27	11.9
Total(1) or average	10,742	1.3	1,244	2.9

(1) Excludes operators of small incorporated family enterprises.

Age

Unemployment during the survey week is unrelated to age (Table 4.7). Among blacks there is a very slight increase in unemployment with age; the unemployment rate of the oldest men (ages 55-59) being 0.6 percentage points higher than that of the youngest men (ages 45-49).

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[4] This wage rate difference is consistent with another observation. The average value of net family assets of an unemployed black man was only 9 percent lower than the assets of an employed black ($6,212 versus $6,790). For whites, on the other hand, the average value of the net assets of an unemployed man was about 22 percent lower than that of an employed white worker ($11,548 versus $14,086). Assuming that wage rates and asset values are positively related, the small difference in asset values among blacks tends to confirm the validity of the observed wage rate difference.

Table 4.7 Survey-Week Unemployment Rates, by Age: Men 45-59 Years of Age in the Labor Force, by Color

Age	WHITES		BLACKS	
	Total number in labor force (thousands)	Percent unemployed	Total number in labor force (thousands)	Percent unemployed
45-49	4,810	1.2	493	2.0
50-54	4,396	1.4	436	2.3
55-59	3,620	1.2	340	2.6
Total or average	12,826	1.3	1,269	2.3

Although we do not observe significant differences in unemployment rates by age, there is evidence that labor force behavior does vary as men grow older. Table 4.8 shows that the proportion of men in the labor force declines with age. Comparing the oldest age group to the youngest, by color, we find the labor force participation rate to be 6.5 percentage points smaller for the older whites and 8.7 percentage points smaller for the older blacks. Thus, it appears likely that as they grow older, men are more likely to leave the labor force upon leaving a job rather than to seek new employment. This might account for the low correlation between unemployment and age. However, we cannot conclude that older men leave the labor force simply because of the effect of unemployment. In Chapter 3 we found that the main reason given by older men for leaving the labor force is health and related conditions. It is interesting to speculate that poor health may interact with potential unemployment in such a manner as to raise an unhealthy man's job-search costs so high that he drops out of the labor force rather than into unemployment when he loses a job.

Table 4.8 Labor Force Participation Rates during the Survey Week, by Age: Men 45-59 Years of Age, by Color

Age	WHITES		BLACKS	
	Total number (thousands)	Labor force participation rate	Total number (thousands)	Labor force participation rate
45-49	4,977	96.6	525	93.9
50-54	4,619	95.2	481	90.6
55-59	4,019	90.1	399	85.2
Total or average	13,615	94.2	1,405	90.3

Family Characteristics

Marital status An older male's marital status appears to be associated with his employment stability. The survey-week unemployment rate for married whites is 0.8 percentage points less than that for never-married whites, and 0.6 percentage points less than for divorced or separated whites (Table 4.9). Among blacks, the unemployment rate for married men is 5 percentage points less than that of never-married men, and 4 percentage points less than that of widowed men. We think it is very interesting that the difference in rates between married whites and married blacks is quite small (0.7 percentage points) compared to the difference between whites and blacks who are widowed (6 percentage points) and between whites and blacks who never married (4.9 percentage points). The difference in weeks of unemployment in 1965 is, similarly, smaller between married whites and blacks than between men in any of the other marital classes.

Number of dependents In addition to the observation that the incidence of unemployment is lower among married men, we see that definite family responsibilities, as represented by having some dependents, also is associated with both lower survey-week unemployment rates and less unemployment experience in 1965 (Table 4.9). Unemployment rates and unemployment experience are lower among men with one to three dependents than among men with none and than among men with four or more dependents. Whites with one to three dependents were unemployed about one-half week less than whites with either none or four or more dependents. The corresponding difference among blacks was nearly one week. A plausible explanation of this somewhat U-shaped relationship would include the following elements. Men with no dependents probably experience more of what is usually called "frictional" unemployment, as evidenced by their higher average number of weeks out of the labor force, lower labor force participation rate, and lower degree of job attachment. In addition, the group of men with no dependents probably contains most of the divorced, separated, and never-married men, who have already been shown to experience exceptionally high unemployment. Finally, those men without dependents are likely to have greater financial "staying power" than their counterparts with dependents, and, thus, are likely to remain unemployed longer while choosing a new job. On the other hand, high unemployment among men with four or more dependents is probably a reflection of a negative relationship between number of children and both educational and occupational level. That is, men with four or more children probably over-represent the less-well-educated men, the majority of whom are found in those occupational categories where unemployment is highest.

Health

The fact that a man's health imposes limitations on the kind and/or amount of work he can perform has a relationship with unemployment that is in accord with our expectations (Tables 4.10, 4.11). During the

Table 4.9 Survey-Week Unemployment Rate and Unemployment Experience in 1965, by Selected Family Characteristics: Men 45-59 Years of Age, by Color

Family characteristic	WHITES				BLACKS			
	Survey week		1965		Survey week		1965	
	Total number in labor force (thousands)	Percent unemployed	Total number with work experience (thousands)	Average number of weeks unemployed	Total number in labor force (thousands)	Percent unemployed	Total number with work experience (thousands)	Average number of weeks unemployed
Marital status								
Married	11,654	1.3	12,229	1.0	1,053	2.0	1,135	2.5
Widowed	192	0.0	233	1.1	50	6.0	61	3.6
Divorced or separated	430	1.9	494	2.5	121	1.7	139	4.5
Never married	519	2.1	617	1.9	43	7.0	61	3.4
Total or average	12,826	1.3	13,608	1.1	1,269	2.3	1,400	2.7
Number of children at home								
None	4,909	1.7	5,400	1.5	572	2.6	651	3.1
1	3,035	0.9	3,159	0.8	232	0.4	249	2.2
2-3	3,723	1.0	3,821	0.8	246	2.4	268	2.0
4 or more	1,160	2.0	1,228	1.6	219	3.2	232	3.1
Total or average	12,826	1.3	13,608	1.1	1,269	2.3	1,400	2.7
Number of dependents (excluding wife)								
None	4,972	1.8	5,476	1.6	443	2.3	519	3.2
1	3,084	0.7	3,195	0.5	256	1.6	275	2.4
2-3	3,473	0.8	3,549	0.9	304	2.3	320	2.1
4 or more	1,164	1.6	1,232	1.3	243	3.3	259	2.9
Total or average	12,826	1.3	13,608	1.1	1,269	2.3	1,400	2.7

Table 4.10 Unemployment Experience in 1965, by Type of Occupation and Two Measures of Health: Men 45-59 Years of Age, by Color

Health measure	White collar		Blue collar		Service		Farm		Total	
	Total number (thousands)	Average number of weeks unemployed	Total number (thousands)	Average number of weeks unemployed	Total number (thousands)	Average number of weeks unemployed	Total number (thousands)	Average number of weeks unemployed	Total number (thousands)	Average number of weeks unemployed
	WHITES									
Effect of health on work										
Limits kind or amount	1,094	0.5	1,382	3.1	227	2.6	397	1.1	3,100	1.9
Does not limit	4,045	0.4	4,713	1.4	446	0.4	725	0.3	9,966	0.9
Total or average	5,270	0.4	6,395	1.7	738	1.3	1,164	0.6	13,608	1.1
Self-rating of health										
Excellent and good	4,334	0.4	4,718	1.8	531	1.4	718	0.3	10,338	1.1
Fair and poor	758	0.5	1,460	1.8	153	1.2	407	1.2	2,782	1.3
Total(1) or average	5,270	0.4	6,395	1.7	738	1.3	1,164	0.6	13,608	1.1
	BLACKS									
Effect of health on work										
Limits kind or amount	42	1.3	159	3.9	52	3.8	54	1.7	311	3.1
Does not limit	149	0.3	624	2.9	145	2.6	85	3.9	1,004	2.6
Total(1) or average	199	0.5	837	3.2	208	2.8	149	2.9	1,400	2.7
Self-rating of health										
Excellent and good	143	0.3	572	2.9	146	3.4	72	4.9	937	2.8
Fair and poor	46	1.1	237	4.0	56	1.5	75	1.0	416	2.8
Total or average	199	0.5	837	3.2	208	2.8	149	2.9	1,400	2.7

(1) Total includes those whose health "prevents" working.

survey week and during 1965, both black and white men who reported some kind of health limitation experienced more unemployment than did other men. Whites with limitations were unemployed one week more than those with no limitations, and among blacks the difference was one-half week (Table 4.10). During the survey week, whites and blacks with health limitations had an unemployment rate about 1.5 percentage points greater than men with no limitations (Table 4.11). From Table 4.10 it is clear that the relationship under discussion has a strong occupational dimension, e.g., among whites the unemployment difference between the healthy and unhealthy is largely attributable to the difference between such men in blue collar jobs.

Self-rated health appears to have a strong relationship with unemployment rates during the survey week, but almost no association with unemployment experience in 1965 (Tables 4.10, 4.11). The similarity among the unemployment experiences of healthy and unhealthy black men is partly due to the curious observation that healthy blacks in service and farm occupations were unemployed over two weeks more than their less healthy counterparts. It is also well to note that even though proportionately more blacks than whites rated their health as "fair" or "poor," this difference does not appear to account for much of the overall inter-color difference in unemployment rates. That is, if whites are assigned the self-rated-health distribution of blacks, the inter-color difference in unemployment rates is only reduced from 1.0 percentage point to 0.9 percentage points.

Table 4.11 Survey-Week Unemployment Rates, by Two Measures of Health: Men 45-59 Years of Age in the Labor Force, by Color

Health measure	WHITES		BLACKS	
	Total number in labor force (thousands)	Percent unemployed	Total number in labor force (thousands)	Percent unemployed
Effect of health on work				
Limits kind or amount	2,865	2.4	264	3.4
Does not limit	9,898	1.0	998	1.8
Total(1) or average	12,826	1.3	1,269	2.3
Self-rating of health				
Excellent or good	10,147	1.2	913	1.8
Fair or poor	2,204	2.0	312	4.0
Total or average	12,826	1.3	1,269	2.3

(1) Total includes those whose health prevents working.

Educational Attainment

As expected, the survey-week unemployment rates are higher for men with fewer years of schooling. Among whites, men with seven or fewer years of schooling had a 2.1 percent unemployment rate, which was 1.4 percentage points--threefold--more than men with 13 or more years of schooling (Table 4.12). Blacks with eight or fewer years of education had unemployment rates more than twice as high (about 1.4 percentage points) as those with 12 or more years of schooling.

The same negative relationship, only more striking, is seen between unemployment experience in 1965 and years of education. Black men with seven or fewer years of education were unemployed an average of 3.3 weeks, while those with either a high school degree or some college training had only 1.1 weeks of unemployment. Similarily, the more highly educated whites were unemployed about one week less than the less educated whites.

By either unemployment measure we see that differences in unemployment experience are smaller between whites and blacks within schooling categories than between all whites and blacks taken together. Furthermore, the difference in number of weeks of unemployment during 1965 is larger in the lower schooling categories than in the higher categories.

Vocational Training

Approximately one-half of the whites in the labor force, but only 30 percent of the blacks, had acquired some sort of vocational training outside of school (Table 4.12). The unemployment rate for whites with *no* vocational training was only 0.2 percentage points higher than the unemployment rate for whites *with* vocational training. However, blacks without training had a 2.6 percent unemployment rate, compared to an average 1.5 percent rate for all blacks with some vocational training and to a 0.9 percent rate for blacks with one or more years of training. Men with one or more years of training had lower unemployment rates and fewer weeks unemployed in 1965 than did either men with less than one year of training or men without any.[5] On the other hand, white men

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[5] The positive association between education and training means that the data on unemployment experience by years of training may simply reflect the underlying occupational and educational differences in unemployment experience.

Table 4.12 Survey-Week Unemployment Rate and Unemployment Experience in 1965, by Measures of Education: Men 45-59 Years of Age, by Color

Measures of education	WHITES				BLACKS			
	Survey week		1965		Survey week		1965	
	Total number in labor force (thousands)	Percent unemployed	Total number with work experience (thousands)	Average number of weeks unemployed	Total number in labor force (thousands)	Percent unemployed	Total number with work experience (thousands)	Average number of weeks unemployed
Years of school completed								
Less than 8	2,094	2.1	2,364	1.7	662	2.7	752	3.3
8	2,315	1.1	2,475	1.5	149	2.7	161	2.8
9-11	2,708	1.4	2,897	1.4	219	1.4	232	2.8
12	3,164	1.3	3,262	0.8	149	1.3	155	1.1
13 or more	2,481	0.7	2,532	0.4	83	1.2	89	1.1
Total or average	12,826	1.3	13,608	1.1	1,269	2.3	1,400	2.7
Years of vocational training programs								
Less than 1	3,022	1.3	3,169	1.3	158	1.9	175	4.9
1 or more	3,275	1.2	3,359	0.7	211	0.9	224	1.3
Total with training	6,557	1.2	6,827	1.0	391	1.5	423	2.8
Total without training	6,190	1.4	6,697	1.2	870	2.6	967	2.7
Total or average	12,826	1.3	13,608	1.1	1,269	2.3	1,400	2.7

without training experienced about the same unemployment as did men with less than one year of training.[6]

Family Labor Force Status

Unemployment rates during the survey week were lower for both whites and blacks with working wives than for unmarried men or for men whose wives did not work during 1965 (Table 4.13). Similarly, there is an indication that whites whose wives worked full time in 1965 (50-52 weeks) had lower unemployment rates than those whites whose wives worked part time in 1965, but the opposite relationship is seen among blacks whose wives worked. These observations suggest that, among whites, unemployment of the principal breadwinner is not the main motive for wives entering the labor market. The data relevant to blacks are somewhat puzzling in so far as they imply that while wives are not induced to work by the unemployment of the man, those wives who are employed are disposed to work more by the adverse employment situations of their husbands. The same general inferences with respect to blacks can be drawn from the information on unemployment experience in 1965 (Table 4.14). It is important to bear in mind that the observed relationships between the men's unemployment experience and their wives' labor force experience may be confounded by a high correlation between husband's and wife's occupational (and educational) status.

Blacks with at least one employed child age 14 or over experienced less unemployment in 1965 (1.9 weeks) than did those with no working children (3 weeks). The same pattern is observed among whites although it is much less pronounced (Table 4.14). It does not seem unlikely that this relationship contains an occupational dimension. That is, children of men in those occupations characterized by low 1965 unemployment experience--white collar workers and farm managers--find it easier to obtain employment.

Family Financial Resources

Total family income in 1965, excluding respondent's earnings Among blacks in particular, but to some extent among whites also, there appears to be some association between unemployment and amount of "other" income in the family unit. The unemployment rate of blacks with no other income was 1.3--at least 1 percentage point lower than unemployment among men

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[6] A possible explanation for the stronger relationship between the amount of vocational training and the survey-week unemployment rates than between training and weeks unemployed in 1965 is that a number of men with less than one year of training were not in the labor force during the survey week (Table 4.12). Yet, they were in the labor force during 1965 and had a significant amount of unemployment during that year.

Table 4.13 Survey-Week Unemployment Rate, by Labor Force Status of Respondent's Wife: Men 45-59 Years of Age in the Labor Force, by Color

Labor force status of respondent's wife	WHITES		BLACKS	
	Total number of men in labor force (thousands)	Percent unemployed	Total number of men in labor force (thousands)	Percent unemployed
No wife	1,232	2.1	238	3.8
Wife not employed	6,203	1.4	457	2.8
Wife employed	5,391	1.1	574	1.0
0-26	1,031	1.5	148	0.0
47-49 weeks	1,325	1.6	122	1.6
50-52 weeks	2,965	0.7	292	1.4
Total or average	12,826	1.3	1,269	2.3

Table 4.14 Unemployment Experience in 1965, by Labor Force Status of Family Members During 1965: Men 45-59 Years of Age with Work Experience, by Color

Labor force status of family members in 1965	WHITES		BLACKS	
	Total number with work experience (thousands)	Average number of weeks unemployed	Total number with work experience (thousands)	Average number of weeks unemployed
Respondent's wife				
No wife	1,435	2.0	291	3.8
Wife not employed	6,535	0.8	494	2.8
Wife employed				
0-26 weeks	1,100	1.7	157	2.0
27-49 weeks	1,361	1.4	132	2.8
50-52 weeks	3,104	1.0	311	1.9
Total or average	5,639	1.3	614	2.2
Total or average	13,608	1.1	1,400	2.7
Respondent's children				
No children 14 years or older	6,731	1.4	814	2.9
No children employed	2,694	0.9	294	3.0
Children employed	4,179	0.8	291	1.9
Total or average	13,608	1.1	1,400	2.7

with some other income (Table 4.15). Similarly, those blacks experienced between one and three fewer weeks of unemployment in 1965 than did men with other income. The same pattern, but less pronounced, exists among whites. That is, men with no other income had the lowest unemployment rate and the fewest weeks of unemployment in 1965.

Especially among blacks, the relationship between unemployment and other income conflicts with our findings of less unemployment among those men with a working wife and/or child.[7] On the basis of those findings, we should have expected to find unemployment experience to be higher among blacks with no other income, or among those in the lower income categories, but we do not. The answer to the conflict may lie in the large number of men who either did not know the earnings of members of their families in 1965 or from whom this information could not be ascertained. The proportion of blacks from whom the labor force status of family members could not be ascertained was only about 2 percent; however, about 22 percent did not know their family's income or the information could not be obtained. The large number of men from whom inadequate information on family income was obtained would make any analysis of the observed relationships tenuous.

Family net assets Among both whites and blacks, the survey-week unemployment rate and the average number of weeks unemployed in 1965 are negatively related to the net value of family assets, except that the unemployment rates of both whites and blacks begin to rise (slightly for whites, more so for blacks) in the highest asset category (Table 4.15). However, in the highest asset category, there is not a similar increase in weeks unemployed in 1965. What is quite significant is the high unemployment experience among men with the fewest assets. Among whites with assets valued at less than $500, the unemployment rate is 3.2 percent. They also experienced 3.2 weeks of unemployment. These figures are 2.1 percentage points and 2.2 weeks greater, respectively, than for whites with assets valued between $5,000 and $15,000. Among black men, the comparable differences in the measures are 4.2 percentage points and 2.2 weeks. Because of the high positive correlation between assets and both educational and occupational level, the negative association between assets and unemployment is probably largely reflective of occupational and educational effects on unemployment. For the remainder of the relationship between assets and unemployment, it is impossible to be confident of the direction of causation.

Motivation to Work

Those men who selected "good wages" as the more important aspect of a job experienced about one week more of unemployment in 1965 than did

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[7] We assume that the earnings of other family members constitute the greater portion of "other" family income. No doubt this is more plausible for blacks than for whites in this age cohort.

Table 4.15 Survey-Week Unemployment Rate and Unemployment Experience in 1965, by Selected Measures of Family Financial Resources: Men 45-59 Years of Age, by Color

Selected measure of family financial resources	WHITES				BLACKS			
	Survey week		1965		Survey week		1965	
	Total number in labor force (thousands)	Percent unemployed	Total number with work experience (thousands)	Average number of weeks unemployed	Total number in labor force (thousands)	Percent unemployed	Total number with work experience (thousands)	Average number of weeks unemployed
Total net assets								
$0-499	728	3.2	849	3.2	240	4.6	291	4.0
$500-4,999	1,248	2.1	1,358	1.6	203	2.0	221	2.4
$5,000-14,999	2,698	1.1	2,819	1.0	247	0.4	259	1.8
$15,000 or more	3,987	1.2	4,111	0.7	113	2.7	117	1.5
Total or average	12,826	1.3	13,608	1.1	1,269	2.3	1,400	2.7
Total income in 1965 excluding respondent's earnings								
None	1,729	1.0	1,769	0.7	305	1.3	310	1.8
Less than $1,000	2,827	1.4	2,928	1.1	307	3.3	321	2.7
$1,000-2,999	2,204	2.1	2,458	1.3	199	2.6	252	3.2
$3,000-4,999	1,562	1.5	1,657	1.5	102	4.9	116	3.0
$5,000 or more	1,557	1.4	1,663	1.2	79	3.8	89	4.8
Total or average	12,826	1.3	13,608	1.1	1,269	2.3	1,400	2.7

men who selected "liking the work" (Table 4.16). A significantly lower proportion of white and black men in white collar occupations, compared to the proportions in other occupations, opted for good wages. Among men in white collar jobs, there is no difference in weeks unemployed between those who chose good wages and those who selected liking the work, but in the other occupations, men of both color groups who selected good wages experienced about one week more of unemployment in 1965 than did men who chose liking the work (except among white service workers).

There are two possible explanations for these differences in unemployment experience. First, men who place a relatively high value on wages are perhaps more likely than others to want to change jobs (even if this involves a period of unemployment) in order to improve their economic positions. Moreover, wage rates on different jobs are easier to discover and evaluate than are nonpecuniary employment conditions. Second, men who say that liking the work is more important may be able to achieve more satisfaction in activities in which they engage while out of the labor force than other men--especially those men whose qualifications make it difficult for them to find pleasant work. That is, only employment in the labor force yields a wage, but satisfying activities conceivably may be found outside the labor force. This condition could interact with potential unemployment in such a way that men who say that wages are more important than liking the work are more likely to remain in the labor force when they lose their jobs, even if this involves being unemployed. However, examination of the data on weeks in the labor force in 1965 suggests that this explanation is much more tenable for whites than for blacks, because only for whites (except farmers) is weeks-in-the-labor-force larger for men who answered that good wages are more important than liking the work.[8]

Other Correlates

PSU unemployment rate in 1960 For both whites and blacks, the highest unemployment rates in the survey week and the greatest amount of unemployment experience in 1965 tended to occur in those areas which had the highest unemployment rates in 1960 (Table 4.17). The hypothesis that unemployment among blacks was greater because they happened to be located in labor markets with high levels of unemployment is unsupportable. Our data indicate that a slightly greater proportion of whites than blacks was located in areas which had the highest 1960 unemployment rates, and that a slightly greater proportion of blacks than whites was located in areas of least unemployment in 1960.

It is interesting that we do not find the gap between whites and blacks in weeks of unemployment in 1965 narrower in areas of the lowest 1960 unemployment rates. In fact, blacks experienced about two more weeks of unemployment than did whites in areas where the 1960 unemployment rate was below 4.2 percent as well as in those areas where the rate was above 6.2 percent. However, the survey-week data reveal quite a different

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[8] See Chapter 3, Table 3.14.

Table 4.16 Unemployment Experience in 1965, by Type of Occupation and Motivation to Work : Men 45-59 Years of Age with with Work Experience, by Color

(Percentage distribution)

Motivation to work	White collar		Blue collar		Service		Farm		Total	
	Percentage distribution	Average number of weeks unemployed	Percentage distribution	Average number of weeks unemployed	Percentage distribution	Average number of weeks unemployed	Percentage distribution	Average number of weeks unemployed	Percentage distribution	Average number of weeks unemployed
	WHITES									
Good wages	14.0	0.5	23.5	2.7	22.9	0.5	18.8	1.8	19.4	1.9
Liking the work	86.0	0.4	76.5	1.5	77.1	1.7	81.2	0.3	80.6	1.0
Total percent	100.0	0.4	100.0	1.7	100.0	0.9	100.0	0.6	100.0	1.1
Total number (thousands)	5,270		6,395		738		1,164		13,608	
	BLACKS									
Good wages	28.0	0.6	52.8	3.6	40.5	3.0	64.5	3.9	48.6	3.3
Liking the work	72.0	0.5	47.2	2.6	59.5	2.3	35.5	1.5	51.4	2.0
Total percent	100.0	0.5	100.0	3.2	100.0	2.8	100.0	2.9	100.0	2.7
Total number (thousands)	199		837		208		149		1,400	

Table 4.17 Survey -Week Unemployment Rate and Unemployment Experience in 1965, by PSU Unemployment Level in 1960: Men 45-59 Years of Age, by Color

PSU unemployment level in 1960	WHITES				BLACKS			
	Survey week		1965		Survey week		1965	
	Total number in labor force (thousands)	Percent unem-ployed	Total number with work experience (thousands)	Average number of weeks unemployed	Total number in labor force (thousands)	Percent unem-ployed	Total number with work experience (thousands)	Average number of weeks unemployed
Less than 4.2 percent	3,041	1.3	3,195	0.8	335	0.9	361	2.7
4.2 - 6.2 percent	7,347	1.2	7,792	1.0	744	2.7	829	2.5
6.2 percent or more	2,439	1.9	2,621	1.7	190	2.6	209	3.6
Total or average	12,826	1.3	13,608	1.1	1,269	2.3	1,400	2.7

situation. Blacks in the areas of the lowest 1960 unemployment had less unemployment (by 0.4 percentage points) than whites.

Spells of unemployment in 1965 As expected, survey-week unemployment rates are positively related to spells of unemployment in 1965; rising, among whites, from 0.5 percent for those with no spells of unemployment to 20.4 percent for those with three or more spells, and among blacks from 0.6 percent to 7.3 percent (Table 4.18). There is virtually no inter-color difference in survey-week unemployment rates for those men who experienced no unemployment in 1965.

Nearly one-fourth of the blacks and one-tenth of the whites who were unemployed during the survey week had had no work experience in 1965. Thus, the unemployment rate for blacks with work experience in 1965 was 0.5 percentage points less than the rate for all blacks. Among blacks, about two-fifths of those entrants to the labor force who had no work experience in 1965 were unemployed at the time of the survey; whereas the comparable proportion among whites was about one-fifth.

Table 4.18 Survey-Week Unemployment Rates, by Number of Spells of Unemployment in 1965: Men 45-59 Years of Age in the Labor Force with Work Experience in 1965, by Color

Number of spells of unemployment in 1965	WHITES		BLACKS	
	Total number (thousands)	Percent unemployed	Total number (thousands)	Percent unemployed
None	11,390	0.5	1,022	0.6
1	674	4.6	113	6.2
2	190	9.5	34	8.6
3 or more	206	20.4	55	7.3
Total or average	12,743	1.2	1,252	1.8

Summary and Conclusions

In general, more years of education, higher wage rates, higher values of family assets, the extended participation in vocational training programs, and good health are all associated with low unemployment. Family composition is also an important unemployment correlate. Married men experienced the least unemployment in 1965 and had low unemployment rates during the survey week. Also, those men with children, particularly those with one to three children, experienced very low unemployment. Among whites, the relationship between the labor force status of other family members and the male's unemployment experience is not very clear. However, among blacks, the presence of other family members in the labor force is associated with less unemployment.

The correlations between our two measures of unemployment, and between either measure and weeks out of the labor force, spells of unemployment, and the 1960 unemployment level in the local areas reveal the systematic incidence of unemployment in a number of ways. First, even though five years elapsed, unemployment among these older men remains high in areas which had high unemployment in 1960. Second, there are clear indications that the greatest incidence of unemployment during the survey week is among men with the most unemployment experience during 1965. Third, in some instances it appears that an out-of-the-labor-force measure, instead of a measure of unemployment, takes on the expected relationship with an independent variable (e.g., age). This suggests that some characteristics of men at the margin of the labor force are hard to distinguish, and that, particularly among older men, the path out of the labor force often passes through an unemployment experience.

Similar to our findings on labor market participation, differences between the occupational distribution of whites and blacks, and variables related to occupation, can account for much of the greater incidence of unemployment among blacks than among whites. A greater proportion of whites are in white collar occupations where, for both whites and blacks, unemployment experience is much less than among blue collar workers. We can explain some of the differences in the incidence of unemployment between whites and blacks by recourse to inter-color differences in education, health, family status, and financial resources; but our preliminary analysis suggests that much of the explanation still remains to be made.

Chapter 5*

MOBILITY AND JOB ATTACHMENT

Most of the dynamics on the supply side of the labor market can be subsumed under the general heading of labor mobility. In conventional economic theory, labor mobility refers to the propensity of workers to change jobs in response to the perception of more attractive alternatives. The theory assumes that workers are mobile in this sense, i.e., that they are responsive to differentials in "net economic advantage," especially wage differentials. Since wage differentials signify the relative social importance of different jobs as measured by the market, when workers move in the direction of higher paying jobs they are moving from work situations where they are contributing relatively less to the social product to those in which they are contributing relatively more. In other words, mobility is the process through which a competitive labor market achieves an optimum allocation of human resources at the same time that it permits the individual to maximize his own well-being.

The term mobility is also frequently used to refer to the actual movement of workers among jobs rather than to their propensity to move. Most empirical data on "mobility" are in terms of actual job movement, and researchers have frequently inferred a propensity to move from the fact of job movement, but this involves some obvious dangers. For one thing, actual shifts from one job to another may be involuntary as well as voluntary, and propensity has no relevance to the former. Moreover, propensities to move may exist without any resulting movement if alternative job opportunities do not exist.

Whether labor mobility is used in the sense of propensity to move or in the sense of actual job movement, it embraces a number of different types of job change. Interfirm mobility refers simply to a change of employers. Occupational mobility relates to change of occupation, and industrial mobility to change of industry. Geographic mobility of labor conceptually, refers to a change of job that necessitates a change of residence: a move, in other words, from one local labor market area to another. These types of moves are clearly not mutually exclusive. A given job change may involve all four, as, for instance, when a salesman in a hardware store in Chicago takes a job as a shipping clerk in a tire manufacturing firm in Akron. Finally, the terms *labor force mobility* and *employment mobility* have frequently been used to refer to shifts into and out of the labor force and between employment and unemployment. It is thus apparent that mobility is a concept sufficiently broad to embrace all of the processes whereby the supply of labor can accommodate itself to changes in the level and composition of demand for labor.[1]

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*This chapter was written by Herbert S. Parnes.

What has been said thus far testifies to the importance of mobility in understanding the process of labor allocation. There are other contexts, however, in which mobility measures are important. For one thing, they are a means of summarizing the work histories of individuals. Persons with strong and stable attachments to particular employers, occupations, or geographic areas can be differentiated from those who have made frequent moves. Individuals who have moved up the occupational hierarchy during their working lives can be differentiated from those who have remained at substantially the same level or have moved downward. This concept of vertical mobility is of especial interest to the sociologist, since its extent and character provide a basis for studying social stratification.

From one point of view, it would be no exaggeration to say that our longitudinal study is exclusively an analysis of the mobility of the cohort of men under consideration, for the major contribution of the longitudinal analysis will be to permit the description of all changes in the status of a given set of individuals that occur over the five-year period. We shall be interested in uncovering the environmental and personal "causes" of these changes as well as their consequences for the well-being of the individual and his family.

The purpose of the present chapter is to set a backdrop for that analysis by exploring some of the mobility characteristics of the men on the basis of information we have already collected on their previous work experience and their reactions to their current jobs. First we examine the occupational change during their careers by comparing the type of work they currently do with that of their first full-time job, the longest job of their career, and the occupation they enjoyed most. Next, we focus attention on the extent of geographic movement, comparing the locations of first and current jobs. A crude measure of past interfirm mobility is then provided by examining length of service of employed workers in their current jobs. Finally, the major portion of the chapter is devoted to the explication of a model for explaining strength of attachment to current job and to testing that model on the basis of some of the attitudinal data that have been collected in the initial survey.

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[1] For a fuller treatment of the concept and types of mobility, see Herbert S. Parnes, "Labor Force: Markets and Mobility," *International Encyclopedia of the Social Sciences* (New York: The Macmillan Company and The Free Press, 1968) Vol. 8, pp. 481-86.

I.

Proportion of Careers Served in Selected Jobs

Defining a "job" as a continuous period of service with an employer, we asked our sample of men to tell us about three jobs in which they served: their current one (or most recent, in the case of those currently unemployed or out of the labor force); the first one in which they served at least a month after leaving school; and the one which they had held the longest.[2] The duration of each of these jobs has been expressed as a percentage of the individual's total potential labor force exposure, i.e., the total period of time since starting first job.

On the basis of these data, it appears that a significant minority of men between the ages of 45 and 59 have served over half of their working lives for their present employer or in their present self-employed status (Table 5.1). This proportion is over two-fifths in the case of white men and over a third in the case of the blacks. As many as a tenth of the whites and 7 percent of the blacks have spent their entire careers in one job. At the other extreme, a fifth of all white men and a fourth of the blacks have spent less than a tenth of their careers with their current employers.

In marked contrast to the long tenure in current job, relatively few men served for extended periods in their first job after leaving school. Only slightly over a fifth of the whites and about a fourth of the blacks spent as much as 25 percent of their total working lives to date in their first job. These proportions, it is to be noted, include those for whom the first and current job are the same. It is noteworthy that blacks spent relatively longer periods with their first employers than did whites.

Where tenure with current employer was short (less than five years), information was obtained also about the previous job. Typically, this was of relatively short duration, accounting for less than 10 percent of entire work career in about half the cases of both white and black men.

For approximately three-fourths of both color groups, the longest job of career was one of the three jobs already described (most frequently the current one). The longest job accounted for over half the individual's work career in the case of a majority of the whites and almost a half of

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[2] The longest job, of course, might have been the first or the current job; or all three might have been the same. In addition to these three jobs, men who had started their current (or most recent) job later than 1960 were also asked about the job held immediately prior thereto.

Table 5.1 Duration of Current, First, and Longest Job(1) as Percent of Total Labor Force Exposure: Men 45-59 Years of Age with Work Experience, by Color

(Percentage distribution)

Percent of total labor force exposure(2)	WHITES			BLACKS		
	Current job	First job	Longest job	Current job	First job	Longest job
100	10	10	10	7	7	7
75-99.9	14	1	16	9	2	12
50-74.9	20	3	28	22	3	27
25-49.9	20	8	32	22	13	35
10-24.9	15	21	11	13	26	14
Less than 10	20	58	4	27	50	5
Total percent	100	100	100	100	100	100
Total number (thousands)	13,608	13,608	13,608	1,400	1,400	1,400

(1) Job defined as continuous period of affiliation with a given employer. For men unemployed or out of labor force, "current job" is most recent job held. First job is first job at which individual worked at least one month after leaving school. Longest job is one at which individual worked longest during entire career.

(2) Labor force exposure is total period of time between leaving school and time of survey.

the blacks. It is clear that the information that has been obtained in the survey covers a very substantial part of the total work experience of the men under consideration.

II.

Occupational Change During Work Career

Net Occupational Shifts

As might be expected, there is considerable occupational movement between the beginning of a man's work career and the time he reaches his late forties and his fifties. The net mobility between first and current jobs of our age cohort of males is shown in Table 5.2. A substantial net increase in white collar employment and a substantial decline in farm work occurs over the course of the work careers of men 45 to 59 years of age; but not all of the components of these very broad categories show the same tendencies. Within white collar work, it is the managerial, proprietary, and professional occupations that have grown, while clerical and sales occupations have declined. In the farm category, it is the laborer group that has experienced the drastic decline, while farm managers and proprietors have actually shown a small net increase. While there has been little net change in the blue collar category as a whole, fairly substantial offsetting changes have occurred in the constituent occupation groups: craftsmen have increased substantially, while operatives and laborers have decreased.

This pattern of occupational change reflects two factors: (1) the changing occupational structure of the economy since the 1920's and 1930's when the men under consideration first entered the labor force and (2) the kinds of occupational progression one would expect as careers unfold. The latter of these two influences has been much the more powerful, since only the increase in professional workers and the decrease in farm and nonfarm laborers are basically consistent with long-run trends in occupational structure.[3] Thus, farmers and farm managers show a slight increase in relative importance within this age group despite a substantial decline in the economy as a whole. While clerical workers and operatives have grown in relation to the total male labor force since these men took their first jobs, fewer of them are in those occupations now than then. Conversely, many more have moved into self employment or managerial positions and into craft jobs than can be explained by

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[3] See Seymour L. Wolfbein, Employment and Unemployment in the United States (Chicago: Science Research Associates, Inc., 1964), pp. 194, 198.

Table 5.2 Major Occupation Group of First, Current, and Longest Job:(1) Men 45-59 Years of Age with Work Experience, by Color

(Percentage distribution)

Major occupation group	WHITES			BLACKS		
	Current job	First job	Longest job	Current job	First job	Longest job
White collar	39	27	35	14	8	12
Professional and technical	11	8	11	4	3	3
Nonfarm managers and proprietors	18	2	14	4	1	3
Clerical	5	10	6	5	2	5
Sales	5	6	5	1	2	1
Blue collar	47	46	48	60	43	62
Craftsmen and foremen	25	8	25	13	4	13
Operatives	17	25	20	26	20	30
Nonfarm laborers	5	13	4	21	18	20
Service	6	4	4	15	11	11
Farmers and farm managers	7	4	9	4	4	7
Farm laborers	2	19	2	6	33	7
Total percent	100	100	100	100	100	100
Total number (thousands)	13,608	13,608	13,608	1,400	1,400	1,400

(1)See note 1, Table 5.1.

changes in the overall relative importance of these occupations. These findings correspond closely to those of a recent study of occupational mobility among all men 20-64 years of age, which concluded that clerks, retail salesmen, operatives, and laborers are distinctively entry occupations for men.[4]

It is important to note that although the pattern of movement that has been described portrays rather faithfully the careers of whites, the pattern for black men differs substantially in several respects. Perhaps the best way to summarize the differences is to observe that, by and large, net movements out of lower-status and into higher-status occupations are less pronounced among blacks than whites, and in some cases do not occur at all. The major exception to this generalization is in the case of farm laborers, where the decline is 27 percentage points between the first and current jobs of black men as compared with 17 percentage points for the whites. However, while there was a net exodus of white men from the clerical, operative, and nonfarm labor occupations between first and current job, there were net inflows into these categories in the case of blacks. Moreover, inflows into professional, managerial, and craft occupations were much smaller for the blacks than the whites, despite the fact that the former had smaller proportions in these categories at the beginning of their careers than the whites.

One can put all this another way by noting that the occupational differences between whites and blacks are greater in their current jobs than at the beginning of their careers. The sum of deviations between the two percentage distributions is 53 percentage points in the case of first job and 78 percentage points in the case of current job. At the beginning of his career, a white man was two-and-a-half times as likely as a black man to be in a professional or managerial job; by the time of the survey, the probabilities had become almost three-and-a-half to one. The proportion of blacks who were farm or nonfarm laborers in their first jobs was 1.6 times as great as that of whites. In current jobs, blacks were four times as likely as whites to be laborers.

It thus appears that the disadvantage in occupational status that black men experience relative to whites at the beginning of their careers becomes even more pronounced as the careers of the two groups unfold.[5] Blau and Duncan have established that "being a Negro in the United States has independent disadvantageous consequences for several of the factors that directly affect occupational success."[6] Since this is true, it is not surprising that the effects of whatever factors produce these differences (e.g.,discrimination) should be cumulative over a lifetime.

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[4] Peter M. Blau and Otis Dudley Duncan, The American Occupational Structure (New York: John Wiley and Sons, Inc., 1967), p. 51. This conclusion is based on the fact that the number of men whose first jobs were in these categories "exceeds both the number whose fathers and the number who themselves worked in them in later career stages."

Gross Occupational Shifts

The net change in occupational distribution between first and current job naturally understates considerably the number of individuals who have moved from one category to another between the beginning of their work career and the present. Computations based on data in Table 5.2 indicate that the net change in the occupational distribution of each color group could have been produced by moves of about 5.4 million white men and 400 thousand blacks from one major occupation group to another; actually, almost twice as many white men (10.2 million) and two-and-a-half times as many blacks (1 million) are in different major occupation groups from those in which they began their careers (computed from Table 5.3).

Overall, 23 percent of white men are in the same major occupation group in which they served in their first job. This proportion varies widely, of course, depending upon the occupation of the first job. Almost two-thirds of those who began as professional or technical workers, over half of the managers or proprietors, and over two-fifths of the craftsmen and farm managers are now in the same category. At the other extreme, less than a tenth of those who started their careers as farm or nonfarm laborers and under a fifth of the clerical, sales, and service workers have remained in the same broad occupation groups.

While there are examples of virtually all possible interoccupation group changes, some are much more likely than others. To take one of the most extreme examples, white men who started as professionals have moved into every occupation category except farm laborers (although the number moving into the nonfarm laborer category is so small that it rounds to 0 percent in Table 5.3). However, most of the movers from the professional category have gone into other white collar jobs, primarily managers and proprietors. Only one in eight of the total original group has moved out of white collar employment. Similarly, white nonfarm

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[5] See Blau and Duncan, op. cit., p. 209: "...even when the lower social origin, education, and first occupation of Negroes have been taken into account, their occupational achievement is still far inferior to that of whites."

[6] Blau and Duncan, loc. cit. Emphasis added.

Table 5.3 Major Occupation Group of Current Job, by Major Occupation Group of First Job: Men 45-59 Years of Age with Work Experience, by Color

(Percentage distribution of OCCUPATIONAL DESTINATIONS)

Occupation of first job (1) \ Occupation of current (or last) job	Professional and technical	Nonfarm managers and proprietors	Clerical	Sales	Craftsmen and foremen	Operatives	Nonfarm laborers	Service	Farmers and farm managers	Farm laborers	Total Percent	Total number (thousands)
WHITES												
Professional and technical	64	13	3	6	7	3	0	1	2	0	100	1,079
Nonfarm managers and proprietors	13	54	6	8	15	4	0	0	0	0	100	309
Clerical	13	31	13	9	18	12	2	3	1	0	100	1,366
Sales	8	32	6	16	18	12	1	4	2	1	100	870
Craftsmen and foremen	11	17	3	2	44	14	2	5	2	0	100	1,069
Operatives	5	16	5	6	29	25	6	7	2	1	100	3,269
Nonfarm laborers	3	14	7	2	31	23	9	6	4	1	100	1,727
Service	10	16	8	5	18	23	4	16	2	0	100	471
Farmers and farm managers	4	9	1	3	18	12	4	4	43	2	100	570
Farm laborers	2	10	2	2	25	20	8	6	18	7	100	2,474
Total percent	11	17	5	5	25	18	5	5	7	2	100	
Total number (thousands)	1,492	2,347	727	704	3,334	2,418	642	738	915	249	100	13,608
BLACKS												
Professional and technical	53	7	13	5	4	7	2	8	0	0	100	43
Nonfarm managers and proprietors	37	11	0	0	6	28	12	6	0	0	100	14
Clerical	8	13	27	11	16	8	6	8	0	3	100	32
Sales	3	13	13	23	6	20	3	19	0	0	100	25
Craftsmen and foremen	8	11	1	0	35	27	7	7	2	1	100	58
Operatives	4	4	3	1	16	34	21	16	0	2	100	272
Nonfarm laborers	0	2	5	0	13	32	26	15	3	4	100	249
Service	3	5	10	3	12	31	8	28	20	1	100	151
Farmers and farm managers	2	1	0	0	10	17	27	7	29	6	100	59
Farm laborers	0	3	2	0	10	25	25	12	7	15	100	446
Total percent	4	4	5	1	13	27	20	15	4	6	100	
Total number (thousands)	58	57	65	19	177	376	284	208	61	89	100	1,400

(1) Totals include 103,000 white men whose first job was in armed service.

managers and proprietors have tended either to remain in the same category (54 percent) or to become professionals (13 percent) or craftsmen (15 percent). No other occupational destination accounts for as many as a tenth of those who began in this category.

At the other extreme, not as many as a fourth of the white men who began as service workers are in any single category now (including service). The largest component are those who shifted to semi-skilled manual work (23 percent), but at least a tenth have ended up as craftsmen (18 percent), managers or proprietors (16 percent), professional or technical workers (10 percent), and clerical or sales workers (13 percent).

The pattern displayed by the almost one-fourth of the white men who started as farm workers deserves mention. Substantial numbers (43 percent) of those who began as farmers or farm managers have remained in that occupational category, and an almost equal proportion has gone into skilled (18 percent) and semi-skilled manual work (12 percent) or have become nonfarm managers or proprietors (9 percent). Farm laborers, on the other hand, were much less likely to remain in the same category (7 percent); most of them (55 percent) moved into the same three categories that absorbed the farmers who changed occupational categories, but almost a fifth remained in agriculture as farmers or farm managers.

Comparison of the gross occupational shifts of white and black men reinforces and makes more explicit the conclusions derived from data on net shifts. It will be observed in Table 5.3 that the types of occupational changes made by the blacks are ostensibly less desirable than those of the whites. Take those who began their careers as operatives as an example. Among whites, one-fifth moved into either professional, managerial, or proprietary status, while this was true of less than one-tenth of the blacks. On the other hand, less than a third of the whites either remained operatives or moved into the nonfarm laborer category, in contrast to over half of the blacks. Comparable relationships prevail for each occupation-of-origin category. An easy but very rough way of making this comparison is to note, for each occupation of origin, the percentages lying to the right of the heavy diagonal. The cells in the diagonal, of course, represent the proportion of men in each category of origin who currently are in the same occupation group. If the categories are assumed to be arranged very roughly in order of their relative desirability, cells to the right of the diagonal represent proportions of men who have moved into less desirable occupations and those to the left, those who have moved into more desirable occupations. It will be seen that in every row except that for service workers, the sum of the percentages to the right of the diagonal is higher for blacks than for whites.

Table 5.4 presents the data of Table 5.3 in a different and somewhat more revealing manner.[7] In order to highlight the extent to which current and first occupations depart from a purely random relationship, the percentages in each column of Table 5.3 are divided by the corresponding percentages in the "total" row. In the actual computations, unrounded percentages have been used. The purpose and effect of doing this are best explained by an illustration. According to Table 5.3, white men in sales occupations at the beginning of their careers are more likely to have moved into craft occupations (18 percent) than to have remained in sales (16 percent). While this is true in an absolute sense, it ignores the fact that men in the relevant age category who are in craft occupations outnumber those in sales by a 5-to-1 ratio (25 percent versus 5 percent). Thus, if there were only a random relationship between initial and current occupation, one would have expected 25 percent of the salesmen to have shifted to craft occupations and only 5 percent to have remained in sales. In other words, a random situation would be one in which every row of figures would be identical to the "total" row. By dividing the "total" percentage into that for a given cell, a ratio is obtained which indicates whether movement between the two occupations is greater (more than 1.0) or less (under 1.0) than what would be expected on the basis of random movement only. In our example, this ratio for salesmen who remain in the occupation is 3.0, in contrast with 0.8 for those who move into craft occupations. A literal interpretation would be that white men 45 to 59 years of age whose first job was in sales are three times as likely as all white men of that age to be in sales jobs today. On the other hand, they are only four-fifths as likely as the total group to be in craft occupations.

On the basis of these data, the influence of initial occupation is perceived to be more pronounced. In the case of white men, the cell in the diagonal in every instance, contains a larger value, and generally substantially so, than all the other cells of the same row. In the case of black men, there are only a few exceptions. The barrier between white collar and blue collar occupations is also more evident in these data. Note that in the case of white men, of the 16 cells relating white collar occupations of origin to white collar occupations of destination, only three have values under 1.0. Of the 24 cells relating white collar occupations of origin to all other types of occupations, none shows a ratio as high as 1.0, and only seven have a ratio over 0.5. When blue collar occupations are considered, the nine cells relating these to themselves contain seven values in excess of 1.0; but the 12 cells relating them to white collar occupations contain only five with values that high.

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[7] This method of analysis has been suggested by the work of Blau and Duncan, op. cit., pp. 29-38.

Table 5.4 Relation between First Job and Current Job: Men 45-59 Years of Age with Work Experience, by Color

(RATIOS OF OBSERVED FREQUENCIES TO FREQUENCIES EXPECTED ON ASSUMPTION OF RANDOM RELATIONSHIP) (1)

Major occupation group of first job / Major occupation group of current (or last) job	Professional and technical	Nonfarm managers and proprietors	Clerical	Sales	Craftsmen and foremen	Operatives	Nonfarm laborers	Service	Farmers and farm managers	Farm laborers
	WHITES									
Professional and technical	5.9	0.8	0.6	1.1	0.3	0.2	0.1	0.2	0.3	0.0
Nonfarm managers and proprietors	1.2	3.1	1.2	1.6	0.6	0.2	0.0	0.0	0.0	0.0
Clerical	1.2	1.8	2.4	1.7	0.7	0.6	0.4	0.6	0.1	0.0
Sales	0.8	1.8	1.1	3.0	0.8	0.7	0.2	0.7	0.2	0.4
Craftsmen and foremen	1.0	1.0	0.5	0.4	1.8	0.8	0.4	1.0	0.3	0.0
Operatives	0.4	0.9	1.0	1.1	1.2	1.4	1.2	1.2	0.3	0.5
Nonfarm laborers	0.3	0.8	1.3	0.4	1.2	1.3	1.9	1.1	0.6	0.7
Service	0.9	0.9	1.4	1.0	0.7	1.2	0.8	3.0	0.2	0.0
Farmers and farm managers	0.4	0.5	0.1	0.5	0.7	0.7	0.8	0.7	6.4	1.4
Farm laborers	0.2	0.6	0.3	0.5	1.0	1.2	1.6	1.1	2.7	3.9
	BLACKS									
Professional and technical	12.7	1.8	2.8	3.9	0.3	0.3	0.1	0.5	0.0	0.0
Nonfarm managers and proprietors	8.8	2.8	0.0	0.0	0.5	1.0	0.6	0.4	0.0	0.0
Clerical	1.9	3.2	6.0	8.1	1.3	0.3	0.3	0.5	0.0	0.4
Sales	0.8	3.1	2.8	16.3	0.5	0.7	0.2	1.3	0.0	0.0
Craftsmen and foremen	2.0	2.7	0.3	0.0	2.7	1.0	0.3	0.5	0.6	0.2
Operatives	0.9	1.0	0.6	0.4	1.3	1.2	1.0	1.1	0.1	0.3
Nonfarm laborers	0.1	0.5	1.0	0.0	1.0	1.2	1.3	1.0	0.6	0.7
Service	0.7	1.2	2.1	1.9	1.0	1.1	0.4	1.9	0.1	0.2
Farmers and farm managers	0.6	0.3	0.0	0.0	0.8	0.6	1.3	0.5	6.8	1.0
Farm laborers	0.1	0.8	0.5	0.1	0.8	0.9	1.2	0.8	1.7	2.3

(1) For explanation, see text.

Perhaps because of the heterogeneity of the service occupations, men whose first job was in that category come closer than those in any other to being distributed randomly today. The ratio ranges between 3.0 for those currently in the same occupational category to 0.2 for those who are farmers and 0.0 for those who are farm laborers. But in five of the remaining seven categories, the ratio departs from unity by not more than 0.2 and in none of them by more than 0.4.

Table 5.5 examines the same data from yet another point of view, showing for each occupational category of present job the percentage of men recruited from each occupation-of-origin category. The most closed occupational categories have been the farm occupations because of their declining importance. In the case of both whites and blacks, less than one-fourth of men who are currently farmers or farm laborers were recruited from initial jobs outside of agriculture. For quite different reasons, professional occupations are also relatively "closed," over two-fifths of the present incumbents having started their careers in the same major category. At the other extreme, the nonfarm manager and proprietor category has been the most "open." Over 90 percent of both blacks and whites currently in that category have entered it from other occupational groups.

The foregoing evidence points to a very substantial amount of movement among occupations during the work careers of the men under consideration. Three-fourths of them, irrespective of color, are in different major occupation groups from those of their first jobs. While short-distance moves along the socio-economic hierarchy of jobs are more prevalent than long-distance changes, the latter are by no means uncommon. For both color groups combined, about three-tenths (28 percent) of those who started as blue collar workers are now in white collar jobs; about a fourth (24 percent) of those who began as white collar workers have ended in blue collar occupations. Of those originally in agriculture, half (51 percent) are now in blue collar work and one-seventh (14 percent) in white collar jobs.

These are substantial changes, and testify to a very considerable amount of flexibility and adaptability of the human resource. The data also suggest that the prediction that the youth of today must be prepared to hold several different types of jobs in his lifetime does not represent a completely novel situation. Although the types of job changes have almost certainly been different from those that will be required in the future, the fact is that the typical father of today's youth has also experienced major occupational change during his work career.

Change in Socioeconomic Status

Another way of describing the pattern of occupational change during the careers of our cohort of men is by the extent of vertical movement--i.e., whether they have moved up or down the occupational ladder, or

Table 5.5 Major Occupation Group of First Job, by Major Occupation Group of Current Job: Men 45-59 Years of Age with Work Experience, by Color

(Percentage distribution of OCCUPATIONAL ORIGINS)

Occupation of current (or last) Job / Occupation of first Job	Professional and technical	Nonfarm managers and proprietors	Clerical	Sales	Craftsmen and foremen	Operatives	Nonfarm laborers	Service	Farmers and farm managers	Farm laborers	Total	Total number (thousands)
						WHITES						
Professional and technical	47	6	5	9	2	1	1	2	2	0	8	1,079
Nonfarm managers and proprietors	3	7	3	4	1	0	0	0	0	0	2	309
Clerical	12	18	25	17	7	7	4	6	1	0	10	1,366
Sales	5	12	8	20	5	5	1	4	2	3	6	870
Craftsmen and foremen	8	8	4	3	14	6	4	8	2	0	8	1,069
Operatives	11	22	25	27	29	34	29	31	7	12	25	3,269
Nonfarm laborers	4	10	17	6	16	17	24	14	8	9	13	1,727
Service	3	3	5	3	2	4	4	11	1	0	4	471
Farmers and farm managers	2	2	1	2	3	3	3	3	27	6	4	570
Farm laborers	3	10	5	9	19	21	30	21	50	70	19	2,474
Total percent	100	100	100	100	100	100	100	100	100	100	100	
Total number (thousands)	1,492	2,347	727	704	3,334	2,418	642	738	915	249	13,608	13,608
						BLACKS						
Professional and technical	41	6	9	12	1	1	0	2	0	0	3	43
Nonfarm managers and Proprietors	9	3	0	0	0	1	1	0	0	0	1	14
Clerical	4	7	13	18	3	1	1	1	0	1	2	32
Sales	2	6	5	30	1	1	0	2	0	0	2	25
Craftsmen and foremen	9	11	1	0	12	4	2	2	2	1	4	58
Operatives	19	19	12	8	25	25	21	22	2	5	20	272
Nonfarm laborers	2	8	19	0	19	22	24	19	11	13	18	249
Service	8	13	24	22	11	13	4	21	1	2	11	151
Farmers and farm managers	3	1	0	0	3	3	6	2	28	4	4	59
Farm laborers	4	26	16	4	25	30	41	28	55	75	33	446
Total percent	100	100	100	100	100	100	100	100	100	100	100	
Total number (thousands)	58	57	65	19	177	376	284	208	61	89	1,400	1,400

have remained at substantially the same level. In this context, the occupations that comprise the world of work are conceived to be susceptible to hierarchical arrangement according to the status they confer upon their incumbents. The relative status of occupations has been measured in different ways: sometimes by having samples of the population rank the prestige of different occupations, and sometimes by means of scores representing a composite index of the average income and educational attainment of workers in different occupations.[8] As might be expected, there is a close correlation between the ratings of occupations based upon each of these criteria.

For our purposes, we use the Duncan socioeconomic index of occupations, which assigns a two-digit status score to each three-digit occupational category in the Census classification scheme. The Duncan scores range from 0 to 96, and reflect for each occupation (1) the proportion of male workers in 1950 with educational attainment of four years of high school or more, and, (2) the proportion of males with incomes of $3,500 or more in 1949.[9] Illustrative of the relation between the index score and occupation are the following examples of three-digit occupations for each ten-point interval of the Duncan index:

0- 9	janitors and sextons; construction laborers
10-19	taxicab drivers and chauffeurs; carpenters
20-29	welders and flame cutters; plasterers
30-39	proprietors, gasoline service stations; salesmen and sales clerks, retail trade
40-49	airplane mechanics and repairmen; policemen and detectives, government
50-59	railroad conductors; clergymen
60-69	salesmen, manufacturing; draftsmen
70-79	salaried managers, wholesale trade; chemists
80-89	pharmicists; aeronautical engineers
90-96	chemical engineers; physicians

In classifying changes between first and current job, we have used the first digit of the Duncan index as the criterion. Movement from a lower to a higher first digit score is designated as upward mobility; from a higher to a lower first digit as downward mobility; from one job to another with the same first digit score as lateral mobility. A final category consists of those who have not been occupationally mobile at all; that is, whose first and current job are in the same three-digit occupational category.

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[8] Blau and Duncan, *op. cit.*, pp. 118-19.

[9] See Otis Dudley Duncan, "A Socioeconomic Index for All Occupations," in Albert J. Reiss, Jr., and others, *Occupations and Social Status* (New York: Free Press of Glencoe, 1961), pp. 109-38; Blau and Duncan, *op. cit.*, pp. 117-28.

Before examining and attempting to interpret the data, it is well to reflect for a moment on the statistical and logical problems involved. It is clear that the probability of an upward (or downward) move depends to an important degree on the occupation in which one begins. To be more specific, men whose first jobs have Duncan scores of 90 or better cannot possibly move up (given the measurement method used here); those with scores of 0-9 cannot be registered as being downwardly mobile. It can be predicted with considerable assurance, therefore, that the latter group will include larger proportions of upwardly mobile men than the former. In examining the relationship of vertical mobility to possible explanatory variables, this tendency of "regression toward the mean" must be kept in mind: if occupational change were completely random, disproportionately large numbers of those who start in high-status jobs will move down, and disproportionately large numbers of those who start in low-status jobs will move up.

Table 5.6 Occupational Mobility between First and Current Job:(1) Males 45-59 with Work Experience, by Color
(Percentage distribution)

Type of mobility(2)	WHITES	BLACKS	TOTAL
Same 3-digit occupation	13	14	13
Upward	57	41	55
Lateral	15	23	16
Downward	15	22	16
Total percent	100	100	100
Total number (thousands)	13,608	1,400	15,008

(1) See note 1, Table 5.1.
(2) See text for definitions of types of mobility.

Only about an eighth of all men 45 to 59 are serving in the same occupation in which they began their work careers (Table 5.6). Almost three-fifths have moved into occupations with higher socioeconomic status. The remaining three-tenths are equally divided between those who slipped down and those who moved laterally, but there are rather pronounced differences between whites and blacks. The latter are considerably less likely than the whites to have moved up (41 percent versus 57 percent). Larger proportions of them than of whites have moved downward (22 percent versus 15 percent), and they have also been more likely than whites to have moved laterally. These differences between white and black men are the more significant in view of the "regression toward the mean" phenomenon. Were upward movement random with respect to color, one would expect more blacks than whites to be upwardly mobile because of their lower starting positions. Actually, exactly the opposite relationship prevails. This reinforces our earlier conclusion that the disadvantages relative to whites with which black men began their working lives have become more pronounced during their working careers.

Table 5.7 shows the proportion of men who have remained in the same occupation and the proportion who have moved upward classified by the major occupation group of their first job. Several rather interesting relationships are evident. First, the "regression toward the mean" phenomenon is clearly illustrated by the fact that men of both colors who started as nonfarm laborers have the highest incidence of upward mobility and those who started as professionals or managers the lowest.

Second , consistent with our earlier interpretation of differences in vertical mobility between the two color groups, the differences between whites and blacks are more pronounced when initial occupation is controlled than when overall percentages are used. On the basis of total figures, the probability of upward movement by whites is about two-fifths greater than for blacks. However, the only occupational categories for which the difference in probabilities is this small are service workers, craftsmen, and clerical workers. In many cases (e.g., professionals, managers, salesmen , operatives, and farm managers) the proportion of upwardly mobile is about twice as great among white men as among black men. The smallest difference is among craftsmen, where 48 percent of the blacks and 51 percent of the whites moved up.

Third, the likelihood of an individual's remaining in the specific occupation of his first job varies very considerably from one major occupation group to another. At one extreme, over two-fifths of the white men whose first jobs were as professional workers or managers (farm and nonfarm) were in the same three-digit occupation at the time of the survey. At the other extreme, less than 10 percent of those who started as clerical workers, operatives, service workers, and laborers, were in the same specific occupation when surveyed.

Best Occupational Assignment

Based on their own evaluations of the various types of work they have done, most men 45 to 59 years of age are currently serving in the best occupational assignment of their careers. This is true of about two-thirds of the whites and almost three-fifths of the blacks (Table 5.8). There are variations in the proportion depending on the major occupation group of current job. By and large, the proportion of individuals whose current job is the best of their career varies directly with occupational level. For example, among whites it is four-fifths for professionals but only about two-fifths for nonfarm laborers. Among both color groups, farm workers are somewhat more likely than corresponding levels of nonfarm

Table 5.7 Proportion of Men Remaining in Same Occupation (1) and Proportion Experiencing Upward Mobility between First and Current Job, by Major Occupation Group of First Job: Men 45-59 Years of Age with Work Experience, by Color

Major occupation group of first job	WHITES			BLACKS		
	Total number (thousands)	Percent in same occupation	Percent upwardly mobile	Total number (thousands)	Percent in same occupation	Percent upwardly mobile
White collar	3,624	21	41	114	25	19
Professional and technical	1,079	44	15	43	43	7
Nonfarm managers and proprietors	309	50	15	14	11	0
Clerical	1,366	3	62	32	8	43
Sales	870	10	49	25	23	22
Blue collar	6,065	9	65	579	14	43
Craftsmen and foremen	1,069	18	51	58	14	48
Operatives	3,269	8	59	272	11	31
Nonfarm laborers	1,727	7	84	249	18	55
Service	471	6	63	151	11	56
Farmers and farm managers	570	42	27	59	28	12
Farm laborers	2,474	4	64	446	11	43
Total or average	13,608	13	57	1,400	14	41

(1) Census 3-digit occupation.

Table 5.8 Best Occupational Assignment of Career, by Major Occupation Group of Current Job: (1) Men 45-59 Years of Age with Work Experience, by Color

(Percentage distribution)

Best occupational assignment	Professional and technical	Nonfarm managers and proprietors	Clerical	Sales	Craftsmen and foremen	Operatives	Nonfarm laborers	Service	Farmers and farm managers	Farm laborers	Total
						WHITES					
On current or last job	81	74	59	76	69	59	41	51	85	58	68
On longest job	5	11	17	10	8	12	24	18	0	18	10
On first job	2	2	4	3	4	4	5	5	1	3	3
On other job	12	14	20	12	19	24	30	26	14	21	19
Total percent	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,492	2,347	727	704	3,334	2,418	642	738	915	249	13,608
						BLACKS					
On current or last job	74	59	63	66	71	59	48	51	64	58	58
On longest job	10	18	5	17	7	11	16	19	4	17	13
On first job	10	4	9	0	1	4	4	4	2	4	4
On other job	6	19	23	17	21	25	33	27	30	21	25
Total percent	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	58	57	65	19	177	376	284	208	61	89	1,400

(1) Most recent job for men currently unemployed or out of labor force.

workers (managers and laborers) to regard their current occupational assignment as the best they have ever had.

Very rarely does the worker regard his first occupational assignment as the best of his career (less than 5 percent of both whites and blacks). Moreover, he regards his longest job as his best only about half as frequently as some job other than longest, current, or first job. From one point of view this is a heartening finding, for it suggests that when the worker is not now in his preferred occupation, it is not typically a result of his having slipped down from an assignment that has constituted a career. More frequently, it is simply that a probably varied work experience has included an occupation that he regards as more attractive than the one currently held. This tends to be even more pronounced in the case of blacks than of the whites.

This interpretation is substantiated by the data in Table 5.9. Of those men whose current occupation is the best of their career, large majorities (four-fifths of the whites and three-fourths of the blacks) have served in such occupations at least ten years during their careers and about half have spent at least 20 years in them. But of those whose best occupation was any other than the current job, over half of both color groups served in that occupation under ten years and over 30 percent for less than five years.

Although not shown in the tables, it is interesting to note that of men currently in other than their preferred occupations, about two-fifths left that preferred occupation prior to age 35. The proportion is higher among the blacks than among the whites (46 versus 39 percent). Although most men, understandably, would like now to be in the occupation they have liked best, as many as a fourth of both the whites and the blacks would not, most frequently because they regard the occupation as no longer suitable.

While there is a positive relationship between men's evaluations of their first and current jobs and the relative socioeconomic status of these jobs, the relationship is surprisingly weak. For example, of the white men who singled out their first occupation as the best of their career, about half were in jobs of higher socioeconomic status currently (Table 5.10). While it is true that this proportion is somewhat lower than for the group who regard their present job as the best of their career (51 percent versus 58 percent), it is nevertheless surprisingly high. Moreover, fully an eighth of those who name their current job as best have actually moved down the occupational ladder since their first job. Similar patterns exist among the black men. The criteria in terms of which men evaluate the desirability of working in different occupations appear not always to be reflected in the Duncan index.

Table 5.9 Best Occupational Assignment of Career, by Cumulative Length of Service in that Occupation: Men 45-59 Years of Age with Work Experience, by Color

(Percentage distribution)

Cumulative service in best occupation (years)	WHITES			BLACKS		
	Same as current	Other than current	Total	Same as current	Other than current	Total
Less than 1	2	4	2	3	7	4
1-4	7	27	14	10	31	18
5-9	9	22	13	12	22	16
10-19	28	24	26	28	24	26
20 or more	54	23	44	47	16	34
Total percent	100	100	100	100	100	100
Total number (thousands)	9,108	4,328	13,608	792	576	1,400

Table 5.10 Type of Occupational Mobility Between First and Current Job, by Favorite Occupational Assignment of Career: Men 45-59 Years of Age with Work Experience, by Color

(Percentage distribution)

Type of mobility	Current or last job	Longest job	First job	Other job	Total
	WHITES				
Same 3-digit occupation	16	5	0	9	13
Upward	58	54	51	54	57
Lateral	14	20	21	18	15
Downward	13	21	28	18	15
Total percent	100	100	100	100	100
Total number (thousands)	9,108	1,411	413	2,504	13,608
	BLACKS				
Same 3-digit occupation	18	6	0	12	14
Upward	43	34	42	40	41
Lateral	23	27	27	20	23
Downward	16	33	30	28	22
Total percent	100	100	100	100	100
Total number (thousands)	792	177	56	343	1,400

III.

Geographic Movement

One means of measuring the extent of geographic mobility among the men covered by our survey is to compare the location of their first jobs with their current residence. On this basis, exactly half of all white men 45 to 59 have been geographically mobile (Table 5.11). This is the proportion who currently do not reside in the same county or SMSA as that in which their first job was located. The corresponding proportion among black men is almost three-fifths.[10] The greater mobility of the blacks in this age group of males is attributable to the greater frequency of long-distance moves among them than among whites. Equal proportions of both groups (one-fifth) moved between counties within a state, but relatively more blacks than whites moved from one state to another (37 percent versus 27 percent).

These findings are not inconsistent with the very substantial evidence that black men have in recent years been less geographically mobile than whites. A recent study of geographic mobility based on a national sample of heads of households reported smaller proportions of blacks than of whites 35 or more years of age who had changed area of residence during the previous five years.[11] Moreover, the annual surveys by the Bureau of the Census since 1948 have consistently shown lower intercounty migration rates for blacks than for whites.[12]

The explanation of the apparent difference between these findings and our own lies in the fact that "mobility" in the present study is measured by comparing residence at the beginning and end of a period that is at least 25 years for almost all of the men in the age group, in contrast to the five-year and one-year periods used in the other studies cited. This has two consequences, both of which operate in the

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[10] A recent study of geographic mobility reports that 57 percent of all heads of households live in different labor market areas today from that in which they resided upon leaving high school. John B. Lansing and Eva Mueller, The Geographic Mobility of Labor (Ann Arbor: University of Michigan Survey Research Center, 1967), p. 17.

[11] Ibid., pp. 48-49.

[12] U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 156, December 9, 1966, p. 1.

Table 5.11 Location of First Job Relative to Current Residence, by Major Occupation Group of First Job: Men 45-59 Years of Age with Work Experience, by Color

(Percentage distribution)

Location of first job relative to current residence	Professional and technical	Nonfarm managers and proprietors	Clerical	Sales	Craftsmen and foremen	Operatives	Nonfarm laborers	Service	Farmers and farm managers	Farm laborers	Total
	WHITES										
Same SMSA or county	55	54	55	54	55	51	47	47	67	41	50
Different SMSA or county, same state	15	17	10	15	15	19	29	18	20	30	20
Different state, same division	10	9	14	12	10	11	10	14	4	11	11
Different division	18	18	17	16	16	15	13	17	5	16	16
Abroad	3	3	4	3	5	3	2	4	4	3	3
Total percent	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,079	309	1,366	870	1,069	3,269	1,727	471	570	2,474	13,608
	BLACKS										
Same SMSA or county	46	36	59	62	58	41	38	42	56	37	42
Different SMSA or county, same state	21	16	2	6	6	16	23	8	17	29	20
Different state, same division	12	6	8	16	6	14	14	15	15	19	15
Different division	15	24	20	13	28	29	24	34	12	16	22
Abroad	6	19	10	3	2	0	1	2	0	0	1
Total percent	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	43	14	32	25	58	272	249	151	59	446	1,400

same direction. In the first place, the longer the time period over which comparison is made between initial and terminal residence, the more multiple moves that will be ignored, and there is evidence that white people make moves more frequently than do black people.[13] Second, the time period covered by the present study includes World War II, when the geographic mobility of blacks was substantially higher than before or since, both absolutely and relative to that of whites.[14] Another illustration of the effects of the time period covered and the definition of mobility on the measure of relative mobilities of blacks and whites is provided by our data on length of residence in county (Table 5.12). It will be noted that whether blacks or whites are more mobile on the basis of these data depends on the time period used as the criterion. Identical proportions of each (22 percent) have lived all their lives in the county (or metropolitan area) of current residence. However, within the past 20 years, relatively more whites than blacks moved into the areas in which they currently live (43 percent versus 26 percent).

Table 5.12 Length of Residence in County or SMSA: Employed Men 45-59 Years of Age, by Color

(Percentage distribution)

Length of residence (years)	WHITES	BLACKS	TOTAL
Less than 1	2	2	2
1-4	9	4	8
5-9	10	4	10
10-19	22	16	22
20 or more, but less than all of life	35	52	37
All of life	22	22	22
Total percent	100	100	100
Total number (thousands)	12,655	1,240	13,895

Occupation and Geographic Movement

The incidence of geographic movement between first job and the time of the survey is, with a few exceptions, remarkably independent of the occupation of both first and current job (Tables 5.11 and 5.13) Among

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[13] Lansing and Mueller, op. cit., p. 270.

[14] Ibid., p. 264.

Table 5.13 Location of First Job Relative to Current Residence, by Major Occupation Group of Current Job: Men 45-59 Years of Age with Work Experience, by Color

(Percentage distribution)

Location of first job relative to current residence	Professional and technical	Nonfarm managers and proprietors	Clerical	Sales	Craftsmen and foremen	Operatives	Nonfarm laborers	Service	Farmers and farm managers	Farm laborers	Total
						WHITES					
Same SMSA or county	47	50	49	50	46	50	48	43	75	39	50
Different SMSA or county, same state	14	20	19	20	22	21	29	21	18	24	20
Different state, same division	13	10	14	12	11	12	7	9	4	25	11
Different division	22	16	14	15	19	13	13	16	3	10	16
Abroad	3	3	4	3	2	4	3	12	1	2	3
Total percent	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,492	2,347	727	704	3,334	2,418	642	738	915	249	13,608
						BLACKS					
Same SMSA or county	43	43	53	37	45	36	29	37	89	63	42
Different SMSA or county, same state	29	24	15	0	16	18	28	16	6	25	20
Different state, same division	11	11	12	0	14	15	20	20	4	9	15
Different division	7	20	20	48	25	30	22	27	1	3	22
Abroad	10	2	0	15	0	1	1	0	0	1	1
Total percent	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	58	57	65	19	177	376	284	208	61	89	1,400

white men, the proportion whose first jobs were in the same county as current residence ranges between 51 and 55 percent for all except those whose first jobs were as laborers (47 percent), service workers (47 percent), farmers and farm managers (67 percent), and farm laborers (41 percent). While the lower-than-average mobility of farmers and the higher-than-average mobility of farm laborers was anticipated, it is surprising that those who began their careers as nonfarm laborers should have been more geographically mobile than those who began as professionals, since the latter occupation group has generally been found to be among the most mobile geographically.[15] What may be true is that the greater mobility that has generally been measured for professionals is attributable to repeated moves by certain subsets of the category, but that the proportion of the group which makes no change during the entire work career is not much different than for other occupation groups.

Our sample is large enough for reliable estimates only for those black men who started out as blue collar, service, and farm workers. Of these, craftsmen and farmers and farm managers were least mobile, while farm and nonfarm laborers were most mobile. It is noteworthy that between a fourth and a third of the men in the blue collar and service occupational categories moved from one geographic division of the United States to another. The corresponding proportion of whites was not as high as one-fifth in any occupational category.

When the men are classified by current, rather than first occupation, there seems to be even less variation in geographic mobility (Table 5.13). Among whites, the proportion whose first job and current residence are in the same county ranges between 46 and 50 percent for all occupations except service workers (43 percent), farmers and farm managers (75 percent), and farm laborers (39 percent). Among black men, there is more variation. Clerical workers show less mobility than other white collar occupations. Among the blue collar workers, mobility is inversely related to skill level. Farmers and farm managers have the lowest mobility rates, and farm laborers, unlike their white counterparts, have had much lower than average mobility.

Geographic and Occupational Movement

There is a fairly clear positive relationship between geographic and occupational movement since entrance into the labor market (Table 5.14). Those who have been geographically immobile are more likely to have remained in the same specific (three-digit) occupation and less likely to have been upwardly mobile occupationally than those who have changed county of residence since entering the labor market.

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[15] Herbert S. Parnes, Research on Labor Mobility (New York: Social Science Research Council, 1954), pp. 83-85; Lansing and Mueller, op.cit., p. 50.

Table 5.14 Type of Occupational Mobility between First and Current Job, by Location of First Job Relative to Current Residence: Men 45-59 Years of Age with Work Experience, by Color

(Percentage distribution)

Type of mobility	Same SMSA or county	Different SMSA or county, same state	Different state, same division	Different division	Abroad	Total
			WHITES			
Same 3-digit occupation	19	6	8	9	5	13
Upward	51	64	61	63	44	57
Lateral	16	16	13	13	27	15
Downward	14	15	18	15	24	15
Total percent	100	100	100	100	100	100
Total number (thousands)	5,957	2,448	1,304	1,851	383	13,608
			BLACKS			
Same 3-digit occupation	25	11	10	7	0	14
Upward	38	38	38	48	21	41
Lateral	20	26	26	22	15	23
Downward	18	24	27	22	64	22
Total percent	100	100	100	100	100	100
Total number (thousands)	511	241	182	271	15	1,400

Among whites, for instance, only half of those who remained in the same county moved up occupationally, as compared with over three-fifths of those who changed county or state of residence.[16] On the other hand, almost a fifth of the geographically immobile, as contrasted with well under a tenth of the mobile, had remained in the same specific occupation.

Among black men, the pattern is slightly different. Like the whites, the geographically immobile blacks were much more likely than those who moved to remain in the same occupation. Yet geographic movement is associated with upward occupational mobility only when the geographic move is a substantial one (between geographic divisions). Blacks who moved across division lines, i.e., primarily from South to North, were more likely to have experienced upward mobility than those who remained in the same county, those who changed counties within a state, and those who made interstate moves within a division. Among the latter three categories, there was no difference in the degree of upward mobility. However, there is some evidence that the black man who was geographically mobile ran a slightly greater risk than his non-mobile counterpart of slipping down the occupational ladder. The proportion experiencing downward mobility is under a fifth of those who remained in the same county, but about a fourth of those who made some kind of geographic move.[17]

Without controlling for first occupation, it is not possible to be certain that migration has had an independent effect on occupational movement. For example, we know that persons whose first jobs were low in the occupational hierarchy (e.g., laborers) were somewhat more likely to move geographically than those higher up (e.g., professionals), and upward mobility is more characteristic of the former than the latter, irrespective of migrant status. Nevertheless, a very careful recent analysis of the relation between migration and vertical mobility for all males 20 to 64 concluded that

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[16] Actually, those whose first jobs were abroad had the smallest proportion of upwardly mobile men (44 percent).

[17] It should be noted that moves from South to North may very well represent economic improvement even when the Duncan index registers a downward move, because the index is based on national average income and educational attainment data. A black minister in a rural area of the South who becomes a semi-skilled operative in a Detroit automobile factory has probably moved up in terms of income despite the fact that the Duncan index would register downward mobility.

Whether migration between regions or between communities is examined; whether migration since birth or only after adolescence is considered; whether migrants are compared to nonmigrants within ethnic-nativity groups or without employing these controls; whether education and first job are held constant; and whether migrants are compared to natives in their place of origin or their place of destination -- migrants tend to attain higher occupational levels and to experience more upward mobility than nonmigrants, with only a few exceptions.[18]

There are at least three plausible reasons for this association. First, to the extent that migration is in the direction of economic opportunities, e.g., from farm to city, one would expect migrants to experience upward movement more frequently than those who remain where they are. Second, the mere fact of migration may broaden an individual's horizons and experience and thus improve his chance of success. Finally, migration may be a selective process: those with initiative and other qualities that would in any case produce occupational success may be more likely to migrate than men without these qualities. It is likely that all three of these factors are operative.[19]

IV.

Length of Service in Current Job

The tenure a worker has accumulated in his present job is one measure of his past interfirm mobility. If he has ten years of service with his present employer, for example, he obviously has made no interfirm shift in that period of time. As would be expected, because of their age, men 45 to 59 years old have much longer tenure on their current jobs than male workers taken as a whole. Median tenure for all males at the beginning of 1966 was slightly over five years,[20] as compared with approximately 14 years for the age group under consideration here (Table 5.15). About three-fifths of the men 45-59 have at least ten years of service and over a tenth have 30 years or more. At the

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[18] Blau and Duncan, op. cit., pp. 271-72.

[19] See the excellent discussion in Blau and Duncan, op.cit., pp. 243-75.

[20] Harvey R. Harnel, "Job Tenure of Workers, January 1966," Monthly Labor Review, January, 1967, p. 32.

Table 5.15 Length of Service in Current Job: Employed Men 45-59 Years of Age, by Color

(Percentage distribution)

Length of service (years)	WHITES	BLACKS	Total
Less than 1 year	10	14	11
1-2	7	8	8
3-4	7	9	7
5-9	13	12	14
10-19	26	29	26
20-29	23	21	22
30 or more	12	6	11
Total percent	100	100	100
Total number (thousands)	12,655	1,240	13,895
Median(1)	15.0	12.4	13.8

(1) Computed from grouped data.

other extreme, about a fourth have fewer than five years of service. Blacks have shorter service, on the average, than whites, the difference between the medians being 2.6 years.

Occupation

Table 5.16 shows the proportion of workers in each major occupation group and industry division who have served in their current jobs ten years or more ("long-service" workers).[21] On this basis, there are substantial differences in mobility among some of the occupation categories. Farmers have been by far the least mobile, over nine-tenths having made no change for at least ten years. At the other extreme are the farm laborers, of whom less than two-fifths are long-service workers. As a group, white collar workers have somewhat longer tenure than blue collar workers but the sales category includes a much smaller proportion of long service workers than the other white collar groups. Among blue collar workers, there is little difference between craftsmen and operatives, but both these categories contain considerably larger proportions of long service workers than does the laborer category. Service workers have been more mobile than any of the nonfarm occupational categories.

It is interesting to note that these occupational differentials in mobility are somewhat different from those that prevail among men of all ages. Among all males, for example, operatives have substantially shorter tenure than craftsmen;[22] among the age cohort considered here there is very little difference, with operatives actually containing a slightly larger proportion of long service workers. The explanation doubtless lies in differences in age composition between the two occupational categories in the male labor force as a whole. Among all male workers, operatives are likely to be considerably younger than craftsmen, so that fewer of them could have accumulated ten years of service in a job. This factor, of course, does not operate in the present study; irrespective of occupation, only men between 45 and 59 years of age are included.

It is also noteworthy that much of the difference in tenure between whites and blacks tends to disappear when occupation is controlled. In all three blue collar categories and among service workers, blacks are at least as likely as whites to have accumulated ten years or more of service with their current employers.

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[21] All findings reported in this section on length of service in current job are supported as well by data on median years of service as by the proportions of long-service workers shown in Tables 5.15 and 5.16.

[22] *Ibid.*, p. 35.

Table 5.16 Proportion of Men with Tenure of 10 Years or More in Current Job, by Selected Employment Characteristics: Employed Men 45-59 Years of Age, by Color

Employment characteristic	WHITES		BLACKS	
	Total number (thousands)	Percent with tenure of 10 or more years	Total number (thousands)	Percent with tenure of 10 or more years
Major occupation group				
White collar	5,069	62	190	62
Professional and technical	1,439	62	57	55
Nonfarm managers and proprietors	2,268	64	54	58
Clerical	678	71	59	81
Sales	684	47	19	37
Blue collar	5,659	59	723	56
Craftsmen and foremen	3,118	59	162	63
Operatives	2,038	63	319	62
Nonfarm laborers	540	46	242	44
Service	647	41	176	51
Farmers and farm managers	890	94	60	83
Farm laborers	207	37	73	40
Total or average	12,655	61	1,240	57
Major industry division				
Agriculture	1,118	83	143	58
Mining, forestry and fisheries	107	50	10	70
Construction	1,334	46	157	39
Manufacturing	3,815	66	352	66
Transportation and public utilities	1,198	76	131	68
Wholesale and retail trade	1,987	56	129	45
Finance, insurance, real estate	507	57	38	50
Service	1,618	47	184	45
Public administration	919	61	92	72
Total or average	12,655	61	1,240	57
Class of worker				
Wage and salary	10,109	58	1,094	55
Government	1,751	54	232	64
Private	8,358	59	860	53
Self employed	2,535	74	147	67
Unpaid family workers	3	0	0	0
Total or average	12,655	61	1,240	57

Industry

Among white men, agriculture contains the heaviest concentration of long service workers (83 percent), but among black men the proportion of long service workers in agriculture is hardly any different from the average of all industries (Table 5.16). This reflects the much larger proportion of farmers (relative to farm laborers) among the whites. In transportation, communications, and public utilities, the proportion of long-service workers is substantially above average for both color groups. Above average tenure also prevails in manufacturing. As might be expected, because of the nature of the employment relationship in the industry, construction has the smallest proportion of long-service workers, although not much smaller than in the service industry division.

Class of Worker

As would be expected, self-employed males in the age group 45 to 59 are much more likely than wage and salary earners to be long-service "workers." Almost three-fourths of the whites and two-thirds of the black self employed had ten or more years of service, as contrasted with less than three-fifths of the wage and salary workers in each group (Table 5.16).

There is an interesting difference between the color groups in the relation between government and private employment. Among whites, there is a slightly larger proportion of long service workers in the private than in the public sector (59 percent versus 54 percent). Among blacks, on the other hand, the government has a substantially larger proportion of long-service workers than the private sector (64 percent versus 53 percent). This difference between the two color groups may reflect a comparative advantage that black men have in public service. For one thing, government is the source of a much larger proportion of white collar jobs for blacks than for whites, and tenure is greater among white collar than blue collar workers. Moreover, if, as seems plausible, the difference between black and white men in susceptibility to layoff is less in public than in private employment, this also would account for the observed differences in tenure.[23]

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[23] If one assumes purely for purposes of illustration, that the probability of layoff (each year) in private employment is .20 for whites and .25 for blacks, and that the probability is .10 for both color groups in public employment, the pattern of layoffs would produce equal tenures for the two color groups in public employment, but lower tenure for blacks than for whites in private employment. However, if the quit rate is at all sensitive to the relative security afforded by the job, one would expect quit rates to be lower in public than in private employment for both color groups with, however, a larger differential in the case of blacks than in the case of whites. Considering the effects of both voluntary and involuntary separations, the result would correspond to the patterns of tenure that have been observed.

Age

The inverse relation between age and mobility that has been documented by virtually all studies of the subject apparently prevails, for white men but not for blacks, even within the relatively narrow age limits of the present study (Table 5.17). The proportion of employed whites who have changed jobs within the past five years is almost half again as great among men 45 to 49 years old (29 percent) as among those 55 to 59 years of age (20 percent).

Marital Status

There is clear evidence in Table 5.17 that marital history bears a rather pronounced relationship to employment experience. In the case of both color groups, men who are widowed, divorced, or separated are much more likely than currently married men to have changed jobs in the five years preceding the survey. In the case of white men, for instance, this proportion is under a fourth for married men, but two-fifths for divorced or separated men and just a shade less than that for widowers. It is doubtful that this greater mobility on the part of widowed, divorced, and separated men can be explained in terms of their lesser family responsibilities; never-married men, who may be expected to have even fewer family obligations, have been no more mobile than the married men, at least in the case of whites. It seems plausible to hypothesize on the basis of these data that the termination of a marriage, either by death, divorce, or separation, is frequently accompanied by a job change on the part of the male partner. This hypothesis can be tested more precisely for our age cohort by the longitudinal analysis of the data to be collected over the next five years.

Nationality[24]

Men whose families have lived in the United States for at least three generations have shorter tenure in their jobs than those with more recent origins in Europe. Among white collar workers, about a fourth of "Americans" as compared with only a fifth of those of European nationality have served in present jobs under five years (Table 5.18). Among blue collar workers the corresponding proportions are 29 percent versus 24 percent. Similar differences, incidentally, prevail with respect to lifetime geographic mobility as measured by the relation

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[24] According to the classification system used by the Census, nationality is based upon the birth place of the respondent, his parents, or his grandparents. If all were born in the U.S., respondent is classified as U.S. Otherwise, respondent is assigned the nationality of the first of the following born outside the U.S.: (1)respondent, (2)father, (3)mother, (4)paternal grandfather, (5)paternal grandmother, (6) maternal grandfather, and (7) maternal grandmother.

Table 5.17 Proportion of Men with Tenure of 5 Years or More in Current Job, by Selected Demographic Characteristics: Employed Men 45-59 Years of Age, by Color

Demographic characteristics	WHITES		BLACKS	
	Total number (thousands)	Percent with tenure of 5 years or more	Total number (thousands)	Percent with tenure of 5 years or more
Age				
45-49	4,751	71	483	69
50-54	4,333	76	426	70
55-59	3,570	80	331	68
Total or average	12,655	75	1,240	69
Marital status				
Married	11,506	76	1,032	71
Widowed	192	62	47	49
Divorced or separated	422	60	119	56
Never married	508	72	40	54
Total or average	12,655	75	1,240	69

Table 5.18 Proportion of Men with Tenure of 5 Years or More in Current Job, by Type of Occupation and Nationality: Employed White Men 45-59 Years of Age

Occupation and nationality	Total number (thousands)	Percent with tenure of 5 years or more
White collar	5,065	78
U.S. or Canada	2,232	75
North or West Europe	1,618	81
Central or East Europe	572	80
South Europe	332	76
Latin America	22	52
Other	42	63
Blue collar	5,824	72
U.S. or Canada	2,591	71
North or West Europe	1,601	75
Central or East Europe	632	79
South Europe	415	76
Latin America	72	45
Other	68	54
Total or average(1)	12,655	75

(1)Includes service and farm workers not shown separately.

between county of first job and county of current residence. About two-fifths (42 percent) of "Americans" as compared with almost three-fifths of "Europeans" (58 percent) reside in the same county in which they began their work careers.

These nationality differences in mobility help to interpret international differences in labor market behavior. It is commonly asserted that labor is more mobile in the United States than in other countries,[25] but it has not been clear whether this results exclusively from differences in labor market institutions or whether it may also reflect more intangible cultural differences between the United States and European countries. The present evidence suggests that the latter is at least part of the explanation. Additional evidence on this point is presented later in this chapter.

V.

Current Job Attachment

Virtually all studies of labor mobility have found an inverse relation between mobility and age; men in their forties and fifties are much less likely than those who are younger to make voluntary job changes. For these older workers, the period of exploration and experimentation in the labor market that is characteristic of youth is in the distant past. The long tenure that they are likely to have in their jobs has produced valuable equities that would be wiped out if they changed employers. In addition, there are psychological bonds created by lengthy service: the comfort of a familiar routine and a familiar circle of associates. Moreover, because of typical hiring preferences of employers, opportunities for job changes are lower for men in this age category than for younger workers.

But this is not to say that voluntary job changes do not occur among older workers. As has been seen, not all of them have long periods of service; moreover, even some with long tenure occasionally leave their jobs, presumably for greener pastures. An even greater number would probably be willing to do so if opportunities presented themselves.

One of the purposes of our longitudinal study is to ascertain the extent of movement among this group of males who, on average, have relatively stable work attachments. We will be able to quantify the job changes that occur over the five-year period of the study, to analyze their character, and to explore both the causes and consequences from the vantage point of the individuals who experience them. Answers to these questions will contribute to our understanding of the way in which labor markets operate to allocate this group of workers who are either in, or not far beyond, their years of peak productive efficiency.

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[25] Gladys L. Palmer, "Contrasts in Labor Market Behavior in Northern Europe and the United States," Industrial and Labor Relations Review, (July, 1960), pp. 519-32.

To lay a foundation for this analysis is the purpose of this section. We develop a conceptual framework for the study of job attachment and present data on the degree of attachment to their jobs of employed males in the age cohort under study. Relationships between degree of attachment and other characteristics of the workers are explored.

A Conceptual Framework for the Study of Job Attachment

To describe a worker as being highly "attached" to a job[26] can mean one of several things. First, it can connote a high degree of satisfaction with his work situation, i.e., a psychological commitment to it. Second, it may mean a reluctance to leave the job even in the face of alternatives that are ostensibly more economically rewarding. Finally, it can mean a high probability that the worker's job status will not change over time. The first two of these meanings involve dimensions of the worker's attitude toward his job; the third concerns actual behavior.[27] While the three are obviously related to one another, it will be shown below that they are conceptually distinct and require different methods of measurement.

Job satisfaction Regardless of the sense in which attachment is used, it is clear that the concept of job satisfaction cannot be avoided, for even where satisfaction is not a measure of attachment, it may be assumed to be one of its determinants. A definition and method of measuring satisfaction is therefore essential, but the concept is difficult to define operationally.[28] Indeed, Hoppock has suggested that

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[26] We continue, in this section, to use "job" to refer to an affiliation with a particular employer rather than to service in a particular occupation. One can, of course, be interested in attachment to occupation as well as to job, and the framework here presented is equally applicable to both. Most of our data purport to measure attachment to employer, however, and the discussions will therefore have this orientation.

[27] Gladys L. Palmer and others, The Reluctant Job Changer (Philadelphia: University of Pennsylvania Press, 1962), pp. 1-3.

[28] See Frederick Herzberg et. al., Job Attitudes: Review of Research and Opinion (Pittsburgh: Psychological Service of Pittsburgh, 1957), p. 1.

"there may be no such thing as job satisfaction independent of other satisfactions in one's life."[29] As a tentative, but not very helpful definition, he offers the following: Job satisfaction is "any combination of psychological, physiological, and environmental circumstances that causes a person truthfully to say 'I am satisfied with my job.'"[30]

Propensity to stay and probability of staying in job As has been seen, there are two other senses in which the term "attachment" may be used. First it may mean immobility in the technical sense of conventional wage theory, i.e., as the propensity to remain in a particular job despite the perception of positive differentials in the economic perquisites of other jobs; and the degree or strength of attachment may be measured by the size of the differential that the worker is willing to ignore. On the other hand, attachment may be defined simply as the probability of remaining in a particular job.[31] The first of these definitions abstracts from labor market conditions, the extent of the worker's knowledge of alternative opportunities, and the worker's attractiveness to other employers; it simply measures his willingness to change jobs in the face of assumed alternatives. The latter requires the introduction of each of these other variables. Workers with identical "propensities" to change jobs may have quite different probabilities of movement, depending upon the existence and their perception of alternatives, and upon their qualifications.

The distinction between propensity to remain and probability of remaining on a job appears to be useful in interpreting the significance of long tenure in jobs. Long tenure in a particular job is a description of past attachment in the probability sense, for the fact is that the individual has not moved during the given time period. This does not necessarily mean, however, that he has been attached in the "propensity" sense, for it is not known what alternatives were actually available and which of these were known to the worker. On the other hand, long tenure in a job may be, and almost certainly is, a determinant of prospective attachment in both senses. This is so because increasing tenure in the present job ordinarily enhances its value to the worker relative to any given alternative.

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[29] Robert Hoppock, Job Satisfaction (New York: Harper and Brothers, 1935), p. 5.

[30] Ibid., p. 47.

[31] This may take into account, or exclude, the probability of involuntary job separations. In the remaining discussion, only the probability of voluntary separations is considered.

Schematic relationships among the several concepts of job attachment

The relationships among the several concepts that have been discussed may be explored schematically (Figure 1). To avoid confusion and to simplify the exposition, the following terms will now be substituted for the various concepts of "attachment" that have been analyzed above:

Satisfaction:	The degree to which the worker indicates a liking or a preference for his present work situation.
Attachment:	The worker's propensity to stay in his present work situation despite the perception of economically more rewarding alternatives.
Prospective stability:	The probability of worker's remaining in his present work situation (excluding the possibility of involuntary separations). This term is substituted for what was previously described as "attachment in the probability sense."
Tenure:	The length of time the worker has served in his present work situation.

The level of satisfaction (Box IV) that a worker experiences in a particular work situation is conceived to result from an interaction among three variables: the characteristics of the worker (Box I), the characteristics of the job (Box II), and the characteristics of the labor market (Box III).[32] For example, a man whose value hierarchy is such that congenial personal relations are more important than high income may be more satisfied in a small, low-wage firm than an individual whose ranking of these two values is reversed. But the interaction between the characteristics of the worker and those of the job does not occur in a vacuum. The characteristics of the labor market are relevant because they influence workers' expectations. It is postulated, in other words, that the satisfaction that a worker feels in a particular job is to some extent a function of the characteristics of other jobs that he happens to know about.[33]

Like satisfaction, attachment (Box V) is purely an attitude on the part of the worker, which again is a function of the same three basic variables (Boxes I, II, and III). Although satisfaction is logically

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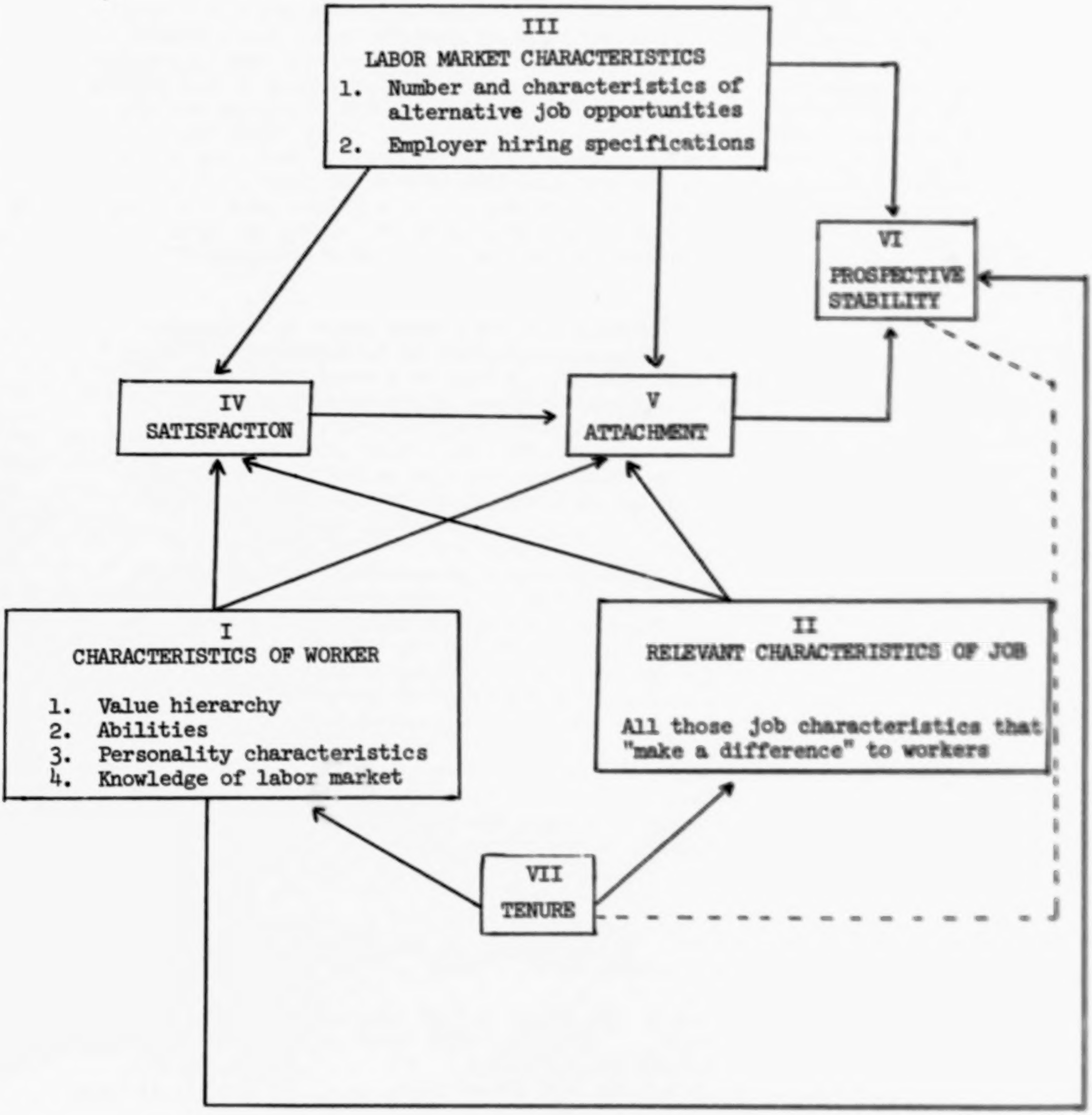
[32] The arrows in the diagram are intended to indicate the direction of influence.

[33] Herzberg cites one study which showed that among workers with equal starting salaries, those whose previous jobs had paid more had higher quit rates than those who had come from lower paying jobs. op. cit., p. 106.

Figure 5.1

Relationships Among Concepts of Job Attachment


III
LABOR MARKET CHARACTERISTICS
1. Number and characteristics of alternative job opportunities
2. Employer hiring specifications
VI
PROSPECTIVE STABILITY
IV
SATISFACTION
V
ATTACHMENT
I
CHARACTERISTICS OF WORKER
1. Value hierarchy
2. Abilities
3. Personality characteristics
4. Knowledge of labor market
II
RELEVANT CHARACTERISTICS OF JOB
All those job characteristics that "make a difference" to workers
VII
TENURE

related to attachment (note arrow between IV and V), the latter is not exclusively a function of the former. The characteristics of the worker, the work situation, and the labor market can combine to produce a level of attachment different from the level of satisfaction. For instance, a worker who places a higher premium on security than on, say, congenial fellow workers may be unwilling to sacrifice his seniority in his present job despite dissatisfaction with it on other grounds, while an equally dissatisfied worker who regards comaraderie as more important than security may have no reservation about leaving. As another example, a worker with low satisfaction may have high attachment because of a personality structure that makes him fearful of a plunge into a new and unknown environment.[34] Finally, a "work-oriented" person may have a lower threshold of job dissatisfaction than a "community-oriented" person.[35]

Labor market characteristics condition attachment in a somewhat different way from that in which they influence satisfaction. Since attachment relates to the worker's reaction to a change of jobs that is assumed to be possible, the actual state of the labor market may, at first thought, appear to be irrelevant. But this is not so, for the worker has no assurance that the particular job to which he is reacting will be permanent, and his willingness to give up the one he has is bound to be influenced by his estimate of the availability of other opportunities.

Unlike satisfaction and attachment, prospective stability in the work situation (Box VI) is not merely a product of a worker's attitudes. Since it relates to the actual probability of his remaining in his job, it is a function of his attachment (Box V), the opportunities for movement inherent in the labor market situation (Box III), and his personal characteristics that determine (a) the extent of his knowledge of alternative opportunities, (b) his initiative and vigor in seeking them out, and (c) his attractiveness to other employers (Box I). In other words, no matter how high a worker's propensity to move (i.e., no matter how low his attachment) the probability of his actual movement is not necessarily great unless there are other jobs that he knows about and unless he is acceptable to other employers.

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[34] See Nancy Morse, Satisfactions in the White Collar Job (Ann Arbor: University of Michigan Press, 1953), p. 53.

[35] See Robert Dubin, The World of Work (Englewood Cliffs: Prentice Hall, 1958), pp. 255-57. It may be that "work-oriented" persons are more inclined to experience dissatisfaction from inadequacies in the work environment, or it may be that at any given level of dissatisfaction, "work-oriented" persons are more inclined "to do something about it."

It will be noted that labor market characteristics play a dual role in affecting prospective stability. On the one hand they are important in shaping the worker's attitudes toward his present job and possible alternatives (satisfaction and attachment); on the other, irrespective of these attitudes, they determine objectively the possibility of actual movement.

The broken line between Boxes VI and VII is intended to signify that tenure is the retrospective or historical equivalent of prospective stability. At the same time, the arrows between Box VII and Boxes I and II indicate that tenure operates indirectly to affect satisfaction, attachment, and prospective stability through its direct effect on the characteristics of the job and the worker, particularly the former. The characteristics of a job in which a worker has served ten years are different from those of the identical job in which he has just begun. For one thing, his tenure creates equities that are, or may be, important determinants of his evaluation of the job; for another, the longer a worker has served in a job, the stronger are the psychological and sociological bonds that tie him to it. Finally, the characteristics of the worker himself may be affected by tenure. For example, his relative attractiveness to his employer as compared with an outsider may be expected to increase as the result of his experience and understanding of the specific requirements of the firm.

Measures of Satisfaction and Attachment

Satisfaction Our measure of satisfaction is a simple one. Respondents were asked, "How do you feel about the job you have now? Do you like it very much, like it fairly well, dislike it somewhat, or dislike it very much?" As in virtually all surveys which have used a similar question, the overwhelming majority of employed men--about 93 percent--indicate that they like their jobs to some degree, and only a negligible number report great dislike (Table 5.19). If those who report only moderately favorable attitudes are grouped with the two categories expressing dislike for their jobs, we have two nearly equal groups--those who like their jobs very much and all others.[36]

Attachment Employed respondents were asked: "Suppose someone in this area offered you a job in the same line of work you're in now.

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[36] It is questionable whether many workers can psychologically afford to admit (even to themselves) dissatisfaction with a situation in which they have voluntarily placed themselves and in which they apparently "choose" to remain. "Well, I guess I'm satisfied or else I wouldn't have stayed here, would I?" is not an atypical response to a question about how satisfied a worker feels in working at a particular company.

Table 5.19 Satisfaction with Current Job: Employed Men 45-59 Years of Age, by Color

(Percentage distribution)

Degree of satisfaction	WHITES	BLACKS
Like it very much	58	51
Like it fairly well	35	40
Dislike it somewhat	5	6
Dislike it very much	2	3
Total percent	100	100
Total number (thousands)	12,655	1,240

Table 5.20 Attachment to Current Job as Measured by Reaction to Hypothetical Job Offers In and Outside Local Area: Employed Men 45-59 Years of Age, by Color

(Percentage distribution)

Reaction to hypothetical job offer	Job offer in local area		Job offer outside local area	
	WHITES	BLACKS	WHITES	BLACKS
Would accept at same or lower wage	12	12	8	6
Would accept for wage increase of less than 10 percent	4	4	1	1
Would accept for wage increase of 10-50 percent	25	30	12	11
Would accept for wage increase of more than 50 percent	8	10	12	17
Would not accept at any conceivable wage	44	38	59	56
Don't know	7	6	8	9
Total percent	100	100	100	100
Total number (thousands)	12,655	1,240	12,655	1,240

How much would the new job have to pay for you to be willing to take it?" An identical question was asked relating to a hypothetical job somewhere outside the local area.

In both cases, the question was open-ended, and responses were coded in relation to current wage rate. Thus, employed males are classified in terms of the percentage increase in wage rates which they report would be necessary in order to induce them to make (1) an interfirm shift in the same labor market area, and (2) a geographic shift to some other area of the country. The distributions,by color, are shown in Table 5.20. About one out of eight of the men indicate a willingness to take a job within the local area at the same (or lower) rate of pay as that of their current job. An additional two-fifths specify some wage increase (most commonly between 10 and 50 percent) for which they would be willing to change jobs. But a slightly larger proportion allege that no conceivable wage increase would induce them to change jobs.

As would be expected, there is greater reluctance to consider a geographic move. Only one-fifth of the men indicate a willingness to take a job outside the local area for anything up to a 50 percent increase over their current wage rate. Three-fifths report that no conceivable increase would cause them to move.

We do not propose to interpret any of these responses literally. It is not necessary to debate, for example, whether the majority of men who say they would not make a geographic shift for any conceivable wage increase are manifesting only limited imaginations rather than limited responsiveness to economic incentives. Our only purpose is to categorize individuals according to their relative degree of attachment to their present jobs or, what amounts to the same thing, according to their propensity to move. We therefore assume only that individuals who say that they would move for a small (or no) wage increase are less highly attached to their current jobs than those who would require a larger increase. The highest degree of attachment is attributed to those who say they would not take the job at any wage. In the analysis that follows, we measure the relative attachment of any given group of workers by the proportion of these very highly attached individuals it contains.

Attachment, Tenure, and Satisfaction

We hypothesize a positive relationship between tenure and attachment, and expect that degree of satisfaction will have an independent effect on attachment irrespective of length of service.

Tenure and attachment Table 5.21 shows a strong and consistent relation between length of service and attachment. Among whites, a worker with 20 or more years of service is more than twice as likely as one with less than a year of service to be unresponsive to higher paying job offers in the locality. Tenure appears to exert a stronger influence

Table 5.21 Proportion of Men Highly Attached to Current Job, by Length of Service: Employed Men 45-59 Years of Age, by Color

Length of service in current job (years)	WHITES			BLACKS		
	Total number (thousands)	Percent who would not take other job at any pay		Total number (thousands)	Percent who would not take other job at any pay	
		In local area	Outside local area		In local area	Outside local area
Less than 1	1,319	25	47	173	17	41
1-2	900	34	52	101	20	45
3-4	893	29	53	114	25	56
5-9	1,745	38	54	148	27	47
10-19	3,325	46	59	361	45	60
20-29	2,875	55	66	258	57	66
30 or more	1,503	59	69	80	65	79
Total or average	12,655	44	59	1,240	38	56

Table 5.22 Proportion of Highly Satisfied Men, by Length of Service: Employed Men 45-59 Years of Age, by Color

Length of service in current job (years)	WHITES		BLACKS	
	Total number (thousands)	Percent who like their jobs very much	Total number (thousands)	Percent who like their jobs very much
Less than 1	1,319	57	173	35
1-2	900	51	101	39
3-4	893	56	114	48
5-9	1,745	55	148	49
10-19	3,325	60	361	56
20-29	2,875	58	258	60
30 or more	1,503	61	80	59
Total or average	12,655	58	1,240	51

on the job attachments of black them of white men. Blacks with short service are less likely than whites to be highly attached to their jobs, but the difference disappears for those with ten or more years of service and is perhaps reversed for very long service workers (30 years or more).

When attachment to current job is measured by reaction to a hypothetical job offer that would require a change of residence, the proportion of highly attached individuals is greater for each color and length of service category. The differences between the two measures, however, are most pronounced in the case of the short-service workers. This is another way of saying that tenure in current job is much less important in explaining geographic mobility than in explaining interfirm mobility within a given labor market area. Even short-service workers are reluctant to consider inter-area job shifts.

Tenure and satisfaction The relation between length of service and job satisfaction is much less distinct, at least for whites, than the relation between length of service and attachment (Table 5.22). Of white workers with less than ten years of service, 55 percent express high satisfaction with their jobs, as compared with 60 percent among those with longer tenure. However, variation within each of these groups is either very slight or in the unexpected direction. For example, those who have served in their jobs less than one year register a higher degree of satisfaction than those with longer periods of service up to ten years.[37] Among blacks, the anticipated relationship is fairly pronounced. Three-fifths of those who have served 20 or more years express high satisfaction, as compared with under two-fifths of those with less than three years of service.

It is rather interesting that differences in job satisfaction between the two color groups prevail only among the short-service workers. Among those with fewer than ten years of service, blacks register less satisfaction with their jobs than whites. Of those with ten or more years of service, on the other hand, there is virtually no difference between the two groups. It will be recalled that the same pattern prevails in the case of attachment. Additional analysis of the characteristics of the workers in relation to the characteristics of the jobs in each color and length of service category is required before a confident explanation of these relationships can be offered. A tentative hypothesis, however, might run as follows: the jobs of black men are less desirable on the basis of objective criteria and thus less likely to evoke high satisfaction or high attachment than those of whites in every length of service category. Nonetheless, long service is more significant to blacks than to whites because it confers relatively more security on the former than the latter. Thus, the mere fact of long service adds more to the total satisfaction (and attachment) of blacks than of whites.

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[37] For a fuller exploration of these relationships and a comparison with the findings of other studies, see Chapter 7, below.

Satisfaction and attachment For both color groups, tenure and satisfaction have clearly independent effects on attachment as measured by reaction to a hypothetical job offer within the local area (Table 5.23). In each length of service category, those who like their jobs very much are more likely to be highly attached than those who express lesser degrees of enthusiasm for their jobs. On the other hand, for any degree of satisfaction, longer service increases the probability of high attachment. It is interesting that those with ten or more years of service who have some reservations about their jobs are nevertheless more strongly attached than those with lesser service who are most highly satisfied.

There is less variation in attachment when measured by reaction to the hypothetical job offer outside the local area. Even among the less-satisfied group with short service, as many as two-fifths claim they would not be willing to make a geographic job shift for any conceivable pay.

Other Correlates of Attachment

Occupation When confronted with alternatives in the local area, white collar workers are, on average, more highly attached to their jobs than blue collar workers, but the differences are substantial only for those with relatively short service (Table 5.24). Among whites with less than five years of service, those in white collar jobs are almost twice as likely as those in blue collar jobs to register high attachment; among those with five or more years of service, the differences are very small. Another way of saying this is that tenure makes a more substantial difference in the attachment of blue collar than white collar workers. This is doubtless a reflection of the greater importance of seniority in assuring security for the blue collar group.

In considering alternative jobs outside the local area, there are no differences, at least among white men, between white and blue collar workers. In the case of blacks, however, the higher attachment of white collar workers persists. As a matter of fact, this appears to be just one facet of an interesting difference in degree of attachment between the two color groups when occupation is controlled. Overall, measured by reaction to a hypothetical local job offer, whites are more highly attached to current job than blacks. However, this turns out to be largely the result of differences existing in the case of short-service blue collar workers. Where numbers are large enough to be statistically reliable, black men in white collar jobs are more highly attached than whites with corresponding tenure. This suggests that when a member of

Table 5.23 Proportion of Men Highly Attached to Current Job, by Length of Service and Degree of Satisfaction with Job: Employed Men 45-59 Years of Age, by Color

Length of service and degree of satisfaction	WHITES			BLACKS		
	Total number (thousands)	Percent who would not take other job at any pay		Total number (thousands)	Percent who would not take other job at any pay	
		In local area	Outside local area		In local area	Outside local area
Less than 5						
Like very much	1,693	36	56	152	32	55
All other	1,385	26	43	226	12	40
5-9						
Like very much	957	42	59	70	31	55
All other	777	30	46	73	20	37
10 or more						
Like very much	4,548	55	65	397	56	68
All other	3,080	47	61	287	46	59
Total or average	12,655	44	59	1,240	38	56

Table 5.24 Proportion of Men Highly Attached to Current Job, by Length of Service and Type of Occupation: Employed Men 45-59 Years of Age, by Color

Length of service (years) and type of occupation	WHITES			BLACKS		
	Total number (thousands)	Percent who would not take other job at any pay		Total number (thousands)	Percent who would not take other job at any pay	
		In local area	Outside local area		In local area	Outside local area
Less than 5						
White collar	1,132	42	52	46	50	61
Blue collar	1,604	23	49	234	19	39
5-9						
White collar	782	38	52	26	26	44
Blue collar	774	36	52	86	22	38
10 or more						
White collar	3,124	51	60	116	57	64
Blue collar	3,405	47	62	415	48	54
Total or average	12,655	44	59	1,240	38	56

a minority group is fortunate enough to have "made it," he is more reluctant than his white counterpart to gamble on a change.

Class of worker As might be expected, self-employed individuals are much more highly attached to their current job status than wage and salary earners (Table 5.25). Moreover, the duration of self employment appears to be irrelevant. Those in this status for under five years indicate no greater receptivity to alternative job offers than those who have been their own bosses for 30 years or longer. It is also interesting that for these individuals it makes little difference whether the alternative being considered is in the local area or outside: they are equally uninterested in both.

Nationality There is a trace of evidence in Table 5.26 that men whose families have lived in North America for at least three generations may have weaker attachments to their jobs than those with more recent European backgrounds. Although the relationships among the various categories of "Europeans" are not consistent, "Americans" have the smallest proportion of highly attached workers in every length-of-service category for hypothetical moves within the local area and in all but one length-of-service category for hypothetical moves involving a change of residence. These relationships are consistent with, albeit weaker than, those reported earlier in the chapter based upon actual movement in the past.

Factors in job satisfaction All employed respondents were asked, "What are the things you like best about your job?" Up to three items were recorded and coded for each respondent. Every respondent was then assigned a summary code designating whether his responses to this question involved intrinsic factors only, extrinsic factors only, or both (Table 5.27). An intrinsic factor is one inherent in the nature of the work, while extrinsic factors relate to such job attributes as pay, security, convenient location, etc. Thus, while the distinction is not hard and fast, intrinsic factors generally relate to the occupation, while extrinsic factors relate to conditions of employment.

It is interesting, and somewhat perplexing, that men who cite only intrinsic reasons for liking their jobs are more highly attached to their current employers than those who cite extrinsic factors. From one point of view, it is perhaps not surprising that the extrinsically oriented manifest a greater readiness to move in response to an economic differential, for they appear to attach greater weight than the "intrinsics" to such factors as wages. On the other hand, since the hypothetical question asks the worker to assume that the job which he is offered is in the same line of work as his present job, the intrinsically oriented would not be giving up by a job shift what he regards as most important, but would be making an economic gain. From this point of view, he should be at least as willing as the extrinsic group to make the change. The explanation may lie in the fact that many workers find it hard to conceive

Table 5.25 Proportion of Men Highly Attached to Current Job, by Length of Service and Class of Worker: Employed Men 45-59 Years of Age, by Color

Length of service (years) and class of worker	WHITES			BLACKS		
	Total number (thousands)	Percent who would not take other job at any pay		Total number (thousands)	Percent who would not take other job at any pay	
		In local area	Outside local area		In local area	Outside local area
Less than 5						
Wage and salary	2,714	25	47	354	16	42
Self employed	388	84	83	35	85	93
5-9						
Wage and salary	1,432	32	50	135	24	44
Self employed	312	81	84	13	81	80
10 or more						
Wage and salary	5,723	44	58	598	48	62
Self employed	1,981	87	87	101	79	92
Total or average(1)	12,655	44	59		38	56

(1) Totals include white unpaid family workers, as well as workers for whom length of service or class of worker was not ascertained.

Table 5.26 Proportion of Men Highly Attached to Current Job, by Length of Service and Nationality: Employed White Men 45-59 Years of Age

Length of service (years) and nationality(1)	Total number (thousands)	Percent who would not take other job at any pay	
		In local area	Outside local area
Less than 5			
U.S. or Canada	1,494	25	47
North or West Europe	810	33	51
Central or East Europe	269	26	50
South Europe	204	27	67
5-9			
U.S. or Canada	707	34	57
North or West Europe	536	38	56
Central or East Europe	197	47	50
South Europe	182	46	51
10 or more			
U.S. or Canada	3,425	50	62
North or West Europe	2,408	51	63
Central or East Europe	817	55	68
South Europe	496	58	64
Total(2) or average	12,655	44	59

(1)For definition of nationality, see text, page 145.

(2)Total includes men of other nationalities, as well as those for whom nationality or length of service was not ascertained.

Table 5.27 Proportion of Men Highly Attached to Current Job, by Length of Service and Factors Liked Best About Job: Employed Men 45-59 Years of Age, by Color

Length of service (years) and factors liked best about job (1)	WHITES			BLACKS		
	Total number (thousands)	Percent who would not take other job at any pay		Total number (thousands)	Percent who would not take other job at any pay	
		In local area	Outside local area		In local area	Outside local area
Less than 5						
Extrinsic only	546	24	44	119	19	39
Intrinsic only	1,003	33	49	93	22	52
5-9						
Extrinsic only	638	31	55	37	24	44
Intrinsic only	832	34	54	36	26	40
10 or more						
Extrinsic only	1,372	45	61	219	54	69
Intrinsic only	2,940	54	65	153	59	63
Total or average (2)	12,655	44	59	1,240	38	56

(1) For definition of "extrinsic", and "intrinsic" factors, see text p. 161.

(2) Total includes men who mentioned both extrinsic and intrinsic factors, as well as those for whom length of service or factors liked best about job were not ascertained.

of a change of employer in which job function remains identical. If this is indeed the case, the difference in reaction recorded here between the "intrinsics" and "extrinsics" is what one would expect.

Past geographic movement Workers who have made geographic job changes in the past--especially if they were interstate moves--appear to be more willing to contemplate such moves currently than those who have not (Table 5.28). Among whites, 63 percent of those currently residing in the county in which they took their first job, state that they would not take a job outside the area at any conceivable pay. Of those who have changed county within a state, the percentage of highly attached is 59, while for the interstate movers, the corresponding proportion is only about one-half.

Home ownership When immobility is measured by reaction to proposed geographic job change, home owners, as might be expected, show greater reluctance to move than those who rent (Table 5.29). The difference is much more substantial in the case of blacks than for whites. Among renters, blacks are more mobile than whites, but among owners the relationship is reversed. Here again is evidence that when blacks have achieved a relatively advantageous position, they are more reluctant than the corresponding group of whites to make a change, presumably because they have relatively more to lose if it does not pan out well.[38]

VI.

Summary and Conclusions

Past Job Movement

A very substantial amount of movement within the labor market takes place between the time men begin their work careers and the time they reach their forties and fifties. For the most part, our measures understate the extent of this movement, since they are largely based on a comparison of first and current (or most recent) jobs, and thus ignore all intervening changes. Nevertheless, about nine out of ten men 45-59 years of age work for a different employer from the one who first hired them; almost as large a proportion (87 percent) work in a different (three-digit) occupation and as many as three-fourths in a different major occupation group; and half work in a different community.

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[38] A number of additional variables have been examined in relation to attachment, including marital status, number of dependents, health condition, and rate of pay. None of these shows any consistent and significant relationship.

Table 5.28 Relation between Past Geographic Movement and Prospective Geographic Mobility: Employed Men 45-59 Years of Age, by Color

Location of first job after leaving school relative to current residence	WHITES		BLACKS	
	Total number (thousands)	Percent who would not take job outside local area for any pay	Total number (thousands)	Percent who would not take job outside local area for any pay
Same county or SMSA	5,583	63	460	60
Different county or SMSA, same state	2,286	59	219	46
Different state, same division	1,192	48	167	59
Different division	1,718	51	232	54
Abroad	353	64	15	0
Total or average	12,655	59	1,240	56

Table 5.29 Relation between Home Ownership and Prospective Geographic Mobility: Employed Men 45-59 Years of Age, by Color

Home ownership	WHITES		BLACKS	
	Total number (thousands)	Percent who would not take job outside local area for any pay	Total number (thousands)	Percent who would not take job outside local area for any pay
Own or buying	9,834	61	673	65
Renting	2,226	53	444	46
Total or average (1)	12,655	59	1,240	56

(1) Total includes men who neither own, buy, nor rent a home as well as those for whom home ownership was not ascertained.

Most of this change has represented improvement. Net occupational change has been from lower status occupations (laborers, operatives, clerical, and sales) to higher status occupations (professional, managers and proprietors, and craftsmen). Of the men whose occupations changed between first and current (or most recent jobs), over three-fifths improved their socioeconomic status as measured by the Duncan index, while less than one-fifth moved downward and an identical proportion remained at approximately the same level.

There are substantial differences, however, between white men and black men in almost all these respects. The latter, by virtually all measures, are more mobile than the former, but are less likely to make favorable moves. Despite their lower starting levels, black men are less likely than white men to move up the occupational ladder, with the result that the occupational disparities between the two groups are greater now than when they first entered the labor force.

Despite the large amount of mobility which has characterized the careers of these men, there has also been considerable stability. Over two-fifths of the white men and more than a third of the blacks have served over half their working lives with their current employers (or in their current self-employed status). Median number of years of service with current employer is about 14 years for the total age group.

Length of service varies, however, by occupation, industry, class of worker, age, marital status, and nationality. There is also a difference by color, with black men having relatively shorter tenure than white men, but much of this difference appears to reflect differences in the occupational composition of the two color groups.

Propective Mobility

The model that we have developed for explaining and predicting mobility appears to be useful in the light of the data we have thus far obtained, although many of the boxes remain to be filled in during the next five years of the study. Our measures of both satisfaction and attachment are positively related to length of service, although the relationship is more distinct in the case of attachment than satisfaction. Satisfaction and attachment, although clearly related to one another, do not appear to be measuring the same thing: a worker may have high satisfaction but relatively low attachment, or vice versa. Certain characteristics of workers (e.g., color and nationality) and certain characteristics of the job (e.g., occupation) have been shown to be related to attachment.

To be sure, the most important relationships indicated in the schema have not yet been tested. The way in which labor market characteristics and the individual worker's qualifications interact with his propensity to move to determine whether he will in fact make a job change remains to be explored as the work record of our sample unfolds. Illustrative of the hypotheses that we shall want to test are the following: (1) workers with high attachment are less likely to make voluntary job changes over the five years of the study than those with low attachment; (2) among workers with low attachment, those in "tight" labor market areas are more likely to change jobs voluntarily than those in "loose" labor market areas; (3) controlling for occupation, the probability that a worker with low attachment will make a voluntary job change is positively related to (a) his education or training, and (b) to the extent of his labor market knowledge.

Despite the fact that we do not yet know whether our measure of "attachment" is really measuring propensity to move, there are a number of reassuring bits of evidence that create some confidence in the measure. Its strong relationship to tenure is one of these, since it is well known that there is a very high negative correlation between length of service and turnover rates. Another is the fact that, at least in the case of geographic shifts, there is a relationship between our measure of propensity and the actual extent of past movement.

Perhaps the most important conclusion to be drawn from our findings thus far is that labor mobility is a much more complex phenomenon than would be imagined on the basis of conventional labor market theory. There, the tendency is to conceive of labor as a more or less homogeneous and fluid factor continuously flowing--or at least oozing--in the direction of net economic advantage. While this conception is doubtless valid and adequate for many purposes, it neglects the rich variety of behavior that actually exists in the labor market. Substantial numbers of workers, particularly in the age group under consideration, appear to be quite unresponsive to market signals and effectively immobilized in their current positions. A full understanding of how the market operates requires knowledge of who the mobile and the immobile workers are and of the factors that condition their responses.

Chapter 6*

THE PROPENSITY TO RETIRE

As indicated in the introductory chapter, an important purpose of the longitudinal analysis of our sample of men will be to uncover the factors accounting for withdrawal from the labor force. The purpose of the present chapter is to lay a foundation for that analysis. We turn first to an examination of the extent to which men 45-59 years of age have private pension coverage,[1] and the closely related question of the extent to which they are in jobs providing for compulsory retirement. Both of these factors bear an obvious relation to the retirement decision: pensions because they facilitate retirement from a financial point of view; compulsory retirement because it requires that the individual leave his "regular" job at a specified age, even though it does not assure his withdrawal from the labor force.

Next, we develop an attitudinal index that purports to measure an individual's "propensity to retire," and examine the variation in this index according to a number of factors that theoretically may be expected to condition retirement attitudes: age, current occupation, pension coverage, economic situation, health status, attitudes toward the work role, number of dependents, and nationality. As the longitudinal aspect of this study unfolds, shifts in these variables will be closely examined in order to test their relationship to retirement plans of men 45-59. We assume such plans will change--perhaps become more concrete--as these men approach the "retirement stage" of their life cycle.

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* This chapter was written by Robert C. Miljus with the collaboration of Andrew I. Kohen and Ronald M. Schmidt.

[1] Pension coverage, in the context of this chapter, refers to any of the following kinds of plans: private employer, civil service, personal annuity. We exclude Social Security and Railroad Retirement coverage because these public programs provide no basis for discriminating among various groups of men in our sample, i.e., 96 percent of the wage and salary workers in this study indicated that they are eligible for pensions under one of those two programs.

I.

Transition from Work to Retirement

There is an extensive literature related to the subjects of retirement and the aging process in general.[2] Certain pertinent facts frequently cited in this literature are: both the absolute number and proportion of older citizens in the U.S. population are increasing; labor force participation rates drop significantly for men in the higher age brackets; for many people the number of hours per day, week, or year spent in an active work role is decreasing as is the duration of the work-span in the human life-cycle. Scientific advance--in the areas of medicine, agriculture and nutrition, technology and production processes--is usually identified as the pervasive force underlying these developments.[3]

With this diminution in time spent at work, increased consideration has been directed in recent years to the ways in which people prepare for their nonwork or leisure time, the specific activities in which they participate, and the extent to which they gain satisfaction from such activities.[4] It appears, however, from much of the literature that one of the historic goals of man, more leisure or time free from work, is not necessarily a boon or blessing for everyone. This seems to be the case especially for older persons. Both the transition from work to retirement and the period of actual retirement generally create tremendous problems of adjustment on their part. A host of economic, sociological, and psychological factors contribute to this difficulty.[5]

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[2] The list is endless; however, some of the more pertinent sources are: Milton Derber (ed.), The Aged and Society (Industrial Relations Research Association, Publication No. 5, 1950); Wilma Donahue and Clark Tibbitts (eds.), Growing in the Older Years (Ann Arbor: University of Michigan Press, 1951) and Planning the Older Years (Ann Arbor: University of Michigan Press, 1950); Ewan Clague, "The Working Life Span of American Workers," Journal of Gerontology, Vol. 4 (Autumn, 1949), pp. 285-89; Harold L. Wilensky, "Life Cycle, Work Situation, and Participation in Formal Associations," in Robert Kleemeier (ed.), Aging and Leisure (New York: Oxford University Press, 1961).

[3] Wilbert E. Moore, "The Aged in Industrial Societies," in M. Derber (ed.), op.cit., pp. 24-39.

[4] L.C. Michelson, "The New Leisure Class," American Journal of Sociology, Vol. 59 (January, 1954), pp. 371-78; David Riesman, "Leisure and Work in Post-Industrial Society," in Eric Larrabee and Rolf Meyersohn (eds.), Mass Leisure (Glencoe, Illinois: Free Press of Glencoe, 1958); Rolf Meyersohn, "Changing Work and Leisure Routines," and Joel Gerstl, "Leisure, Task and Occupational Milieu," both in Erwin O. Smigel (ed.), Work and Leisure: A Contemporary Social Problem (New Haven: College and University Press Services, 1963); Max Kaplan, Leisure in America: A Social Inquiry (New York: John Wiley and Sons, Inc., 1960); Sebastian de Grazia, Of Time, Work and Leisure (New York: The Twentieth Century Fund, 1962).

Economic factors are perhaps for many the most pressing of the three, since adequate economic resources affect not only creature comforts but survival itself. However, even if financial problems do not exist, the individual may be required to relinquish a multiplicity of important social and psychological satisfactions should he terminate his work role. These usually are inherent in his total work situation and may evolve from mutual interaction with friends, fellow workers, and supervisors. Such associations, as well as the nature of his work, may have been important in satisfying his need for recognition, status, respect, and belonging.

From a purely psychic standpoint, the work role offers an outlet for aggressive energy. In this regard, William C. Menninger states,

> Work, even when pleasurable, is usually an effort to master the environment. It is carried on "against" something, or to surmount, solve, or control something.[6]

While accomplishing his work tasks and responsibilities, the individual may find release for his creative instincts, gain self-expression and thereby actualize himself. Morse and Weiss, in their study of the meaning of work among a national sample of employed men, conclude that for most men a job serves a variety of functions in addition to the one of earning a living. They write:

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[5] For further discussion of these problems and factors see: Sumner Slichter, "Retirement Age and Social Policy," in M. Derber, op.cit., pp. 106-14; Robert W. Kleemeier, "The Effect of a Work Program on Adjustment Attitudes in an Aged Population," Journal of Gerontology, Vol. 6 (Autumn, 1951), pp. 372-79; Ernest W. Burgess, "Social Relations, Activities and Personal Adjustment," American Journal of Sociology, Vol. 59 (January, 1954), pp. 352-60; Robert J. Havighurst, "Social and Psychological Needs of the Aging," Annals of the American Academy of Political and Social Science, Vol. 279 (January, 1952), pp. 11-17; E.B. Allen and H.E. Clow, "The Psychology of Retirement," Journal of the American Geriatric Society, Vol. 2 (1954), pp. 796-806; Oscar J. Kaplan, "The Mental Health of Older Workers," in M.Derber, op.cit., pp. 204-18; and Clark Tibbits, "Retirement Problems in American Society," American Journal of Sociology, Vol. 59 (January, 1954), pp. 301-308.

[6] William C. Menninger, "The Meaning of Work in Western Society," in Henry Borow (ed.), Man in a World of Work (Boston: Houghton Mifflin Co., 1964), p. xiv.

> To the typical man in a middle class occupation, working means having a purpose, gaining a sense of accomplishment, expressing himself... To the typical man in a working class occupation, working means having something to do. He feels that not working would leave him no adequate outlet for physical activity; he would just be sitting or lying around...[7]

In summary, it appears that for many men the work role gives meaning and purpose to life; it can be regarded as an axis around which the worker's entire pattern of life is organized. Friedmann and Havighurst summarize this point of view as follows:

> ... the job--or work activity... serves to maintain him in his group, to regulate his life activity, to fix his position in his society, and to determine the pattern of his social participation and the nature of his life-experiences and is a source of many of his satisfactions and affective experiences.[8]

The decision to retire, in view of all this, is not one which can be made lightly by most men, even if there is no financial necessity for working. We turn now to an examination of some of the factors that influence a man's attitudes toward retirement.

II.

Pension Coverage and Compulsory Retirement

This section seeks to provide answers to such questions as: How many workers are covered by pensions? What is the extent of compulsory retirement and what are the usual ages for such retirement? To what extent, if any, do such requirements vary among various occupations and industries? Does such coverage appear to be any greater for either of the color groups, and, if so, what factors may account for such differences?

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[7] Nancy C. Morse and Robert S. Weiss, "The Function and Meaning of Work and the Job," American Sociological Review, Vol. 20 (April, 1955), p. 198.

[8] E.A. Friedmann and R.J. Havighurst, The Meaning of Work and Retirement (Chicago: The University of Chicago Press, 1954), p. 3.

Extent of Pension Coverage

Two-thirds of all employed white men between the ages of 45 and 59, but only one-half of the black men in that category are covered by some type of program (other than Social Security or Railroad Retirement) providing financial benefits during retirement (Table 6.1). Typically this is a plan covering some group of workers in private industry. However, retirement plans for public employees cover 12 percent of the whites and 15 percent of the blacks. It is noteworthy that only one out of twenty white men and one in a hundred black men in this age group have only personal annuity plans. Eight percent of the whites and 3 percent of the blacks have more than one type of coverage.

There are pronounced occupational differences in coverage. White collar workers are much more likely than those in other types of employment to have pension coverage. As would be expected, farm workers are at the other extreme; less than one in seven has this kind of protection.

It is clear that the difference in pension coverage between blacks and whites is attributable primarily to the smaller coverage of blacks than of whites in blue collar jobs.[9] Moreover, among blue collar workers, the chief source of the inter-color difference is that black men are only two-thirds as likely as white men to be covered under private employer plans. This is not an unexpected result since a larger proportion of whites than blacks in blue collar jobs are situated in manufacturing (48 percent versus 42 percent) where private pension plans are relatively widespread, and a larger proportion of blacks than of whites in blue collar jobs are located in the construction industry (19 percent versus 17 percent) where private employer pension programs are relatively uncommon.

Extent of Compulsory Retirement Provisions

Among all wage and salary workers 45-59 years of age, there is no inter-color difference in the extent of compulsory retirement coverage (Table 6.2). Of those with pensions, however, the blacks are more likely than the whites to face compulsory retirement--68 percent in contrast to 60 percent. This difference appears to be attributable primarily to plans covering workers in the private sector in which only 59 percent of the whites, in contrast to 70 percent of the blacks, stated that they face a compulsory retirement provision. The proportion who reported such a provision is actually greater among those covered by government pensions, but it is nearly the same for both color groups. As might be expected,

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[9] While there is also a large difference in pension coverage among farm workers, it cannot account for the overall inter-color difference, since that group forms such a small proportion of the total of wage and salary workers.

Table 6.1 Eligibility for Retirement Benefits, by Type of Occupation and Type of Benefits: Employed Wage and Salary Workers 45-59 Years of Age, by Color

(Percentage distribution)

Eligibility for benefits and type of benefits	White collar	Blue collar	Service	Farm	Total
	WHITES				
Yes	77	63	58	13	67
Personal plans only	6	4	2	0	5
Private employee only	39	43	13	8	39
Government employee only	16	7	32	5	12
Military only	2	2	1	0	2
Combinations	11	7	6	0	8
Now receiving benefits	3	1	4	0	2
No	22	35	40	85	31
Don't know	1	2	2	2	2
Total percent	100	100	100	100	100
Total number (thousands)	3,787	5,347	579	211	9,942
	BLACKS				
Yes	78	47	55	1	49
Personal plans only	1	2	0	0	1
Private employee only	23	28	21	0	24
Government employee only	44	9	23	0	15
Military only	5	3	8	1	4
Combinations	3	3	2	0	3
Now receiving benefits	2	1	1	0	1
No	21	50	41	96	48
Don't know	1	4	4	3	3
Total percent	100	100	100	100	100
Total number (thousands)	141	705	167	75	1,091

Table 6.2 Proportion of Men Who Face Compulsory Retirement, by Eligibility for Retirement Benefits: Employed Wage and Salary Workers, 45-59 Years of Age, by Color

Eligibility for retirement benefits	WHITES		BLACKS	
	Total number (thousands)	Percent who face compulsory retirement	Total number (thousands)	Percent who face compulsory retirement
Yes	6,572	60	524	68
Personal plans only(1)	439	28	18	30
Private employee only	3,809	59	261	70
Government employee only	1,144	81	164	78
Military only	178	25	40	41
Combinations of above	822	66	30	67
Now receiving benefits	180	46	11	45
No	3,089	16	505	19
Don't know	129	6	36	3
Total or average	9,942	45	1,091	43

(1) Comprise insurance annuities.

in the absence of a pension plan the proportion of workers covered by a compulsory retirement provision is much smaller--16 percent for whites and 19 percent for blacks.[10]

As shown in Table 6.3, 65 is by far the most common age for compulsory retirement. Of the surveyed males covered by such a provision, 70 percent of the whites and 66 percent of the blacks reported this age. A slightly higher proportion of black men--6 percent compared to 3 percent of the whites--are required to retire prior to reaching age 65. The remaining 27 percent of the males must retire from their regular job at an age beyond 65.

Table 6.3 Compulsory Retirement Age: Employed Wage and Salary Workers 45-59 Years of Age Who Must Retire, by Color (Percentage distribution)

Compulsory retirement age	WHITES	BLACKS
64 or younger	3	6
65	70	66
66 or older	27	28
Total percent	100	100
Total number (thousands)	4,512	476

Would these men work beyond these compulsory retirement ages if possible? Table 6.4 shows that in each retirement-age category, black men are much more inclined than whites to work longer if they could. For example, of those who must retire at age 65, one of every two blacks compared to slightly over one of every three whites said that they would work longer. Of those who must retire at age 66 or over, the proportions who would work longer if possible are 28 percent for black men and 17 percent for white men.

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[10] The strong relationship between the availability of pension benefits and a compulsory retirement provision was expected. However, the large proportion of workers who reported that they face such a requirement even though pension benefits are not provided is suprisingly high. Such situations are not unheard of, but the magnitude noted here appears unusually high. Fred Slavick, in his 1962 survey of pension policies of business, also found "that the propensity of employers with pension plans to use compulsory retirement is vastly greater than of those without such plans." *Compulsory and Flexible Retirement in the American Economy* (Ithaca, New York: New York State School of Industrial and Labor Relations, Cornell University, 1966), p. 6.

Table 6.4 Proportions of Men Who Would Work Longer if Possible and Who Expect to Retire Earlier, by Compulsory Retirement Age: Employed Wage and Salary Workers 45-59 Years of Age, Who Face Compulsory Retirement, by Color

Compulsory retirement age	WHITES			BLACKS		
	Total number (thousands)	Percent who would work longer if possible	Percent who expect to retire earlier	Total number (thousands)	Percent who would work longer if possible	Percent who expect to retire earlier
64 or younger	146	47	25	27	88	0
65	3,092	37	27	303	50	14
66 or older	1,207	17	71	126	28	61
Total or average	4,512	32	39	476	47	25

The greater attachment to a work role on the part of black men is again evident when the opposite question is raised: "Do you expect to retire before the compulsory retirement age?" When the age standard is 65, only 14 percent of the black men compared to 27 percent of the white men answered that they expect to retire prior to age 65.

Industry Compulsory retirement coverage is prevalent mainly in government, manufacturing, and transportation industries. About 75 percent of the surveyed workers in public administration indicated that they are covered by a mandatory retirement rule (Table 6.5). In manufacturing and transportation, between 52 and 59 percent of the workers are so covered. In comparison, the least coverage exists in agriculture, where employer pensions are practically nonexistent. Only a small proportion of workers in construction and trades reported the presence of a compulsory retirement provision (about one in five workers in each color group).

As discussed above, industries do vary in the degree to which they provide pension benefits and impose a compulsory retirement age. However, with the exception of agriculture, there is very little variation between blacks and whites within the respective industries in the extent of compulsory retirement coverage, i.e., the proportions of each color group who are confronted by mandatory retirement within each industry (where comparable data exist) are quite similar.

Occupation For both white and black men employed as wage and salary workers, the extent of compulsory retirement coverage is greatest among white collar workers (more than one-half) and least among farm workers (less than one-tenth) (Table 6.6). Regardless of color, about one-half of the service workers and about two-fifths of the blue collar workers report such coverage. In general, the occupational differences in the extent of compulsory retirement provisions reflect the occupational differences in pension coverage which have been discussed above.

Within the white collar group, the larger proportion of blacks facing compulsory retirement is attributable mainly to the greater tendency for such rules to exist for black men who are classified as professional and technical workers. The latter difference, in turn, can be explained by the greater concentration of blacks who are professional or technical workers in government employment--25 percent in contrast to 16 percent of their white counterparts. Among the several blue collar occupations, very little variation with respect to mandatory retirement coverage is found for white men; the proportions ranging from 40 percent of craftsmen to 48 percent of laborers. On the other hand, among blacks in blue collar jobs, laborers are much less likely (30 percent) to be covered by a compulsory retirement provision than are craftsmen (47 percent), or operatives (49 percent).

Table 6.5 Proportion of Men Who Face Compulsory Retirement, by Major Industry Division: Employed Wage and Salary Workers 45-59 Years of Age, by Color

Major industry division	WHITES		BLACKS	
	Total number (thousands)	Percent who face compulsory retirement	Total number (thousands)	Percent who face compulsory retirement
Agriculture	217	9	82	3
Mining, forestry, fisheries	140	33	14	52
Construction	1,073	18	140	21
Manufacturing	3,691	52	347	55
Transportation and public utilities	1,123	59	123	56
Wholesale and retail trade	1,284	23	111	22
Finance, insurance, and real estate	382	46	34	26
Services	1,111	42	148	45
Public administration	915	75	92	73
Total or average	9,942	45	1,091	43

Table 6.6 Proportion of Men Who Face Compulsory Retirement, by Major Occupation Group: Employed Wage and Salary Workers 45-59 Years of Age, by Color

Major occupation group	WHITES		BLACKS	
	Total number (thousands)	Percent who face compulsory retirement	Total number (thousands)	Percent who face compulsory retirement
White collar	3,787	52	141	62
Professional and technical	1,210	65	51	74
Nonfarm managers and proprietors	1,345	46	19	56
Clerical	674	64	58	64
Sales	558	24	12	7
Blue collar	5,347	41	705	42
Craftsmen and foremen	2,791	40	147	47
Operatives	2,046	42	322	49
Nonfarm laborers	510	45	236	30
Service	579	48	167	51
Farm	211	9	75	3
Total or average	9,942	45	1,091	43

III.

Correlates of the Propensity to Retire

Concepts and Measures

The term "propensity to retire" may refer to a tendency to withdraw physically from the labor force and retire, or it may refer to worker attitudes concerning the desirability of retirement. It is in the latter sense that the term is employed in this chapter. Our objective in this initial report is to discover the correlates of retirement attitudes. From the results of the subsequent surveys in our longitudinal scheme we hope to discover the relationship between these attitudes and actual retirement behavior.

Several questions included in our interview schedule are designed to assess the degree to which older men are attached to a work role or, conversely, the degree to which they express a preference for retirement. The responses to four of these questions have been used to construct an attitudinal index. The index was constructed by summing the point values assigned to the responses to each question; the highest values being assigned to those responses indicating the strongest preference for a non-work or retirement role.[11]

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[11] The questions and scoring procedure used in constructing the propensity to retire index are as below. The numbers in parenthesis refer to the relevant question in the interview schedule which is reproduced in Appendix F.

a. Preferred age of retirement (Items 39a, b, c and 40a)
    1. already retired--4 points
    2. under 65-- 3 points
    3. 65-- 2 points
    4. 66 or later; will always keep working-- 1 point
    5. Don't know; no data--no points assigned, index cannot be computed
b. Whether will take another job following retirement from regular job (Item 41a)
    1. Yes -- no points
    2. No -- 2 points
    3. Don't know; no data-- no points assigned, index cannot be computed
c. What the individual would do if he were to lose his job (Item 30)
    1. Retire-- 3 points
    2. Any response which suggests not working-- 2 points
    3. Look for work; become self employed-- 1 point
    4. No answer; not ascertained-- no points
d. Whether would continue to work even if were to receive enough money to live comfortably without working (Item 28a)
    1. No-- 3 points
    2. Don't know; it depends-- 2 points
    3. Yes-- 1 point
    4. No answer; not ascertained-- no points

The analysis contained in this section employs three measures derived from the index scores. The primary emphasis is on an examination of the impact of independent variables on *average index values*.[12] Second, in order to describe the nature of the distribution of the scores, the *proportion of individuals with a high propensity to retire* (i.e., all those with a score of at least 7 points) is also shown in all of the tables. Since some of the analysis uses that second measure, a third measure--*the average index value of those with a high propensity*--was computed in order to assess the comparability of different groups with a high propensity. When this last statistic does not appear in the tables, it is because there is little difference in average score among the high propensity groups.

It is apparent from Table 6.7 that a large proportion of workers in the age cohort under consideration tend to have a strong work-role orientation. This is the case for both black men and white men, but slightly more so for the former. The proportion with low or medium propensities to retire is 74 percent for blacks and 70 percent for whites. The remaining workers are the ones whose responses indicate a high propensity to retire.

Age and Color

Age has a consistent effect on the propensity of whites to retire, but with the exception of white collar workers, it has no consistent impact on retirement propensities of blacks (Table 6.7). Among whites, average score, proportion with a high propensity, and average score of those with a high propensity are positively related to age for both white collar and blue collar workers. The extent of the inter-color difference in propensity to retire is evidenced by the data in Table 6.7, which show that among nonfarm workers the average score of blacks is lower than that of whites in every age-occupation category except among the oldest white collar workers.[13] In the following analysis this

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[12] Average index value is the weighted arithmetic mean score.

[13] Even this deviation from the general pattern of association is suspect since the average score for 55-59-year-old blacks in white collar occupations is based on a small number of sample cases.

Table 6. 7 Propensity to Retire, by Type of Occupation and Age: Employed Wage and Salary Workers 45-59 Years of Age

Type of occupation and age	WHITES				BLACKS			
	Total number (thousands)	Average score	Percent with high propensity	Average score of those with high propensity	Total number (thousands)	Average score	Percent with high propensity	Average score of those with high propensity
White collar	3,787	5.3	27	8.0	141	5.1	22	8.0
45-49	1,483	5.2	25	7.8	76	4.9	18	8.1
50-54	1,264	5.3	26	8.0	39	5.0	20	7.7
55-59	1,040	5.6	32	8.3	26	5.8	37	8.1
Blue collar	5,347	5.6	32	8.1	705	5.3	26	8.1
45-49	2,104	5.5	29	7.8	282	5.4	25	8.4
50-54	1,841	5.6	31	8.0	249	5.2	30	7.8
55-59	1,401	5.7	36	8.2	174	5.3	22	8.2
Service	579	5.6	35	7.8	167	5.5	32	7.9
45-49	196	5.6	29	7.7	56	5.6	26	8.1
50-54	180	5.7	39	7.9	58	5.4	38	7.6
55-59	202	5.5	37	7.9	54	5.4	31	8.2
Farm	211	4.6	15	7.4	75	4.8	24	7.5
45-49	49	4.6	15	7.0	16	4.7	22	7.6
50-54	83	4.6	18	7.3	32	5.1	32	7.3
55-59	79	4.7	10	8.1	27	5.6	15	7.8
Total	9,942	5.5	30	8.0	1,093	5.3	26	8.0
45-49	3,832	5.4	27	7.8	430	5.3	24	8.3
50-54	3,368	5.5	29	8.0	378	5.2	30	7.7
55-59	2.722	5.6	34	8.2	281	5.3	24	8.2

inter-color difference is seen to persist even when several independent variables are controlled seriatum.[14]

Occupation

In addition to the important age and inter-color differences, occupation has a pronounced effect on the propensity to retire. For both whites and blacks, the retirement propensities of blue collar workers are much greater than those of white collar workers (Table 6.7). The data indicate that the average scores of the former exceed those of the latter in each age-color group except among the oldest blacks. Furthermore, with the same exception, in each age-color group the proportion of blue collar workers with a high propensity to retire is at least 4 percentage points greater than the proportion of white collar workers with a high retirement propensity.[15] This occupational difference serves to emphasize the strength of the inter-color difference, i.e., the lower average score for black men relative to white men occurs despite the fact that blacks are much more likely to be blue collar workers. The data also indicate that men in farm occupations have a much lower propensity to retire than do men in any other type of occupation.

The fact that both occupation and age affect the propensity to retire provides a methodological problem for the analytic work in this section. The original analysis of our data did not involve the construction of tables in which occupation and age were controlled simultaneously.

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[14] At first glance there does not appear to be a great deal of variation in the average scores contained in the tables of this section. However, a rough statistical examination of the data indicates that among whites, differences of 0.2 of a point or more between average scores are significant at the 5 percent level, when both averages are representative of at least 3,000,000 people. Among blacks, differences of 0.3 of a point or more are significant at the 5 percent level when both averages represent at least 350,000 individuals. Inter-color differences of 0.2 of a point are significant at the 5 percent level when the comparison is either (a) between all white, employed wage and salary workers and at least 500,000 blacks or (b) between all black, employed wage and salary workers and at least 2,500,000 whites. These rough guidelines indicate that the 0.2 of a point inter-color difference among employed wage and salary workers is clearly significant at the 5 percent level.

[15] This tendency for white collar workers to remain in the labor force is also noted in P.D. Steiner and R. Dorfman, The Economic Status of the Aged (Berkeley: University of California Press, 1957), p. 41. They found that men aged 65 or more who had been engaged mainly in non-manual work during their working careers were more likely to be in the labor force than those who had been in manual occupations.

Controlling only for one or the other runs the risk that when an independent variable is related to both age and occupation, the data will not show the precise effect of the additional variable. Most of the discussion in this section is based on tabulations employing the occupation control, because the independent variables employed in the analysis are, in most cases, correlated much more strongly with occupation than with age. Moreover, many of those independent variables which have an impact on the propensity to retire are correlated with occupation in a manner that causes occupational differences to be understated. However, in those cases where there is reason to suspect a strong association between age and an independent variable, both the tables which control for age and those which control for occupation are reported.

Financial Resources

Pension eligibility The data in Table 6.8 confirm the hypothesis that the financial advantages of a retirement pension cause those eligible for pensions to have a higher propensity to retire than those who are not eligible. For blue collar and white collar workers, regardless of color, pension eligibility produces average scores which are higher by at least three-tenths of a point. It is also interesting to note that when only those eligible for pensions are considered, the occupational difference in propensity to retire becomes much larger for both blacks and whites. Thus, the greater extent of pension coverage among white collar workers reduces the overall occupational difference in propensity to retire.

If the mean scores for blacks are standardized by assigning to blacks the extent of pension coverage characteristic of whites, most of the inter-color difference in retirement propensity remains. Specifically, the difference among white collar workers remains unchanged and the difference among blue collar workers is reduced by one-tenth of a point. Thus, the inter-color difference is not attributable to the greater extent of pension coverage experienced by whites.

Family net assets Since sizeable family assets improve the quality of a retired individual's material comforts as well as enhancing the possibility of retirement, it is not surprising that all three measures of the propensity to retire are positively related to assets, irrespective of color or occupation (Table 6.9). This relationship is probably magnified to some extent, particularly for whites, by the fact that assets are positively related to age. However, the association between assets and age is not nearly strong enough to permit the conclusion that the relationship shown in Table 6.9 is spurious.

Among white collar workers, the small number of black men and the absence of any consistent pattern in the existing evidence prevent a reliable estimate of the extent to which the inter-color difference in

Table 6.8 Propensity to Retire, by Type of Occupation and Pension Eligibility: Employed Wage and Salary Workers 45-59 Years of Age, by Color

Type of occupation and pension eligibility	WHITES				BLACKS			
	Total number (thousands)	Average score	Percent with high propensity	Average score of those with high propensity	Total number (thousands)	Average score	Percent with high propensity	Average score of those with high propensity
White collar								
Eligible	2,877	5.4	27	8.0	108	5.2	26	8.0
Not eligible(1)	863	5.1	26	7.9	30	4.4	9	8.3
Blue collar								
Eligible	3,331	5.8	38	8.1	323	5.5	32	8.3
Not eligible(1)	1,932	5.2	21	7.9	367	5.1	21	7.9

(1) Includes individuals who did not know whether they were eligible for pensions.

Table 6.9 Propensity to Retire, by Type of Occupation and Family Net Assets: Employed Wage and Salary Workers 45-59 Years of Age, by Color

Type of occupation and family net assets	Total number (thousands)	Average score	Percent with high propensity	Average score of those with high propensity
	WHITES			
White collar				
Less than $5,000	425	4.9	20	7.7
$5,000-$14,999	831	5.2	28	7.9
$15,000 or more	1,526	5.5	29	8.1
Blue collar				
Less than $5,000	1,069	5.3	26	7.8
$5,000-$14,999	1,475	5.6	30	8.1
$15,000 or more	1,293	6.0	39	8.0
	BLACKS			
White collar				
Less than $5,000	32	4.6	15	7.2
$5,000-$14,999	37	5.2	24	8.0
$15,000 or more	29	5.6	27	8.6
Blue collar				
Less than $5,000	266	5.3	27	8.0
$5,000-$14,999	136	5.3	30	8.4
$15,000 or more	47	5.7	36	8.3

propensity to retire is attributable to an inter-color difference in asset distribution.[16] Among blue collar workers, however, there is no evidence to indicate that the inter-color difference in propensity to retire is produced by an inter-color difference in family assets. There is a strong tendency among blue collar workers for whites to exhibit a higher retirement propensity than blacks. An analysis of the detailed tabulations reveals that this persists in nine of the ten asset categories. Finally, utilizing the standardization procedure with respect to asset distribution eliminates only a small portion of the inter-color difference.

Family assets is another variable which reduces the observed occupational difference in propensity to retire. When the mean score of blue collar workers is standardized by assigning them the asset distribution of men in white collar jobs, the occupational difference in retirement propensity increases by one-tenth of a point among both blacks and whites.

Hourly rate of pay Our data indicate that hourly rate of pay is positively related to the propensity to retire among white collar and blue collar workers for both whites and blacks (Table 6.10). Except among blacks in white collar jobs, men in the highest wage rate category have an average score at least one point greater than the score of men with the lowest rates of pay. This might be interpreted as corroboration of a backward bending supply curve of labor, but it seems more reasonable simply to recognize that there is a strong positive correlation between family assets and rate of pay, and that high-wage workers are more likely than low-wage workers to enjoy pension coverage. Since it is not surprising that low-wage workers with limited financial resources find it difficult to retire, no complicated theoretical explanation is necessary.

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[16] The average scores in Table 6.9 indicate that, except for men with assets of less than $5,000, blacks in white collar jobs have propensities to retire which are as high as those of their white counterparts. However, an examination of more detailed tabulations in which ten asset groups were used reveals that, among white collar workers, the average scores of whites exceed those of blacks in seven of the ten categories. Furthermore, the relevance of the data on assets is clouded by the fact that no asset information was obtained for nearly one-third of the blacks in white collar jobs, and that the average score of such men is lower than the average score of those from whom information was obtained. Thus, when the analysis is limited to those for whom asset data are available, a large portion of the inter-color difference is eliminated by a non-response bias.

Table 6.10 Propensity to Retire by Type of Occupation and Hourly Rate of Pay: Employed Wage and Salary Workers 45-59 Years of Age, by Color

Type of occupation and hourly rate of pay	Total number (thousands)	Average score	Percent with high propensity	Average score of those with high propensity
		WHITES		
White collar				
Less than $2.00	308	4.7	15	7.8
$2.00-$3.00	765	5.2	26	8.0
$3.00-$3.49	[illegible]	5.3	32	7.7
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
$5.00 or more	1,021	5.6	30	8.1
Blue collar				
Less than $2.00	744	4.7	15	7.6
$2.00-$3.00	1,759	5.6	30	8.0
$3.00-$3.49	1,108	5.9	36	7.9
$3.50-$5.00	1,227	5.7	34	8.1
$5.00 or more	358	6.1	44	8.2
		BLACKS (1)		
White collar				
Less than $1.50	14	4.7	13	7.9
$1.50-$2.00	15	4.4	9	11.0
$2.00-$3.00	47	5.0	20	7.7
$3.00 or more	58	5.4	30	8.2
Blue collar				
Less than $1.50	180	4.8	17	7.8
$1.50-$2.00	114	5.3	31	8.1
$2.00-$3.00	216	5.3	22	8.1
$3.00 or more	177	5.8	38	8.2

(1) Wage rate categories are wider in order to eliminate variations due to small sample size.

Job Characteristics

Length of service. For both whites and blacks employed as wage and salary workers, there is a fairly consistent positive relationship between the propensity to retire and length of service on current job (Table 6.11). Since whites have a slightly greater likelihood of being long-service (ten years or more)[17] employees than do blacks--61 percent versus 57 percent--this may partially account for the higher propensity to retire of whites. However, the inter-color difference in retirement propensity, as measured by the average score, does appear to persist in all tenure categories for both white collar and blue collar workers. We believe that the general link between retirement propensity and tenure is reflective of the likely association between inclination to retire and size of pension benefits. Unfortunately, our data do not permit an empirical verification of that hypothesis.

Even though white collar workers appear to be slightly more likely to have long service than do blue collar workers--61 percent versus 59 percent--the higher propensity of the latter persists in both color groups. A priori one might question whether the tenure effect under discussion is merely a proxy for the effect of age on retirement inclination. Two facts serve as a basis for responding negatively to that question. First, as noted earlier, the oldest black men *do not* have a higher propensity than younger blacks to retire. Yet, Table 6.11 clearly indicates a tenure effect among black men serving in white and blue collar jobs. Second, our data indicate that there is but a slight association between age and length of service in general.[18]

Class of worker. When both class of worker and type of occupation are controlled, government employees are seen to have higher propensities to retire than employees in the private sector (Table 6.12). This relationship, which prevails in all occupation-color categories except among black men in blue collar jobs, is doubtless attributable at least in part to the greater pension coverage among government employees.

In addition, Table 6.12 displays one exception to the previously discussed generalization that blue collar workers have a greater inclination to retire than white collar workers; namely that black men in blue collar government jobs have a lower propensity to retire than black men employed in white collar government jobs. This phenomenon seems to be attributable to the large proportion of laborers, who typically have a lower propensity to retire, among blacks employed in

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[17] This is the definition used in Chapter 5, Table 5.16.

[18] See Chapter 2, page 53.

Table 6.11 Propensity to Retire, by Type of Occupation and Length of Service: Employed Wage and Salary Workers 45-59 Years of Age, by Color

Type of occupation and length of service (years)	Total number (thousands)	Average score	Percent with high propensity
	WHITES		
White collar	3,787	5.3	27
Less than 1	286	4.6	19
1-4	616	4.9	21
5-9	581	4.8	20
10-19	911	5.4	30
20-29	828	5.5	27
30 or more	481	6.3	45
Blue collar	5,347	5.6	32
Less than 1	762	5.1	23
1-4	737	5.2	21
5-9	692	5.4	30
10-19	1,446	5.7	33
20-29	1,184	5.9	40
30 or more	534	5.9	35
	BLACKS (1)		
White collar	141	5.1	22
Less than 1	7	5.6	17
1-9	46	4.7	15
10-19	39	5.2	28
20 or more	47	5.4	27
Blue collar	705	5.3	26
Less than 1	109	5.1	25
1-9	195	4.9	18
10-19	222	5.3	26
20 or more	179	5.9	37

(1) *Tenure categories for blacks are constructed to span more years in order to eliminate variations due to small sample size.*

Table 6.12 Propensity to Retire, by Type of Occupation and Class of Worker: Employed Wage and Salary Workers 45-59 Years of Age, by Color

Type of occupation and class of worker	WHITES			BLACKS		
	Total number (thousands)	Average score	Percent with high propensity	Total number (thousands)	Average score	Percent with high propensity
White collar						
Government	884	5.5	33	74	5.2	25
Private	2,903	5.3	25	66	5.0	20
Blue collar						
Government	563	5.6	34	104	4.9	20
Private	4,773	5.6	31	601	5.4	27
Service						
Government	293	5.7	37	54	5.5	33
Private	286	5.4	32	114	5.4	31

blue collar government jobs. It is also interesting to note that introducing the class-of-worker control has the result of reducing the age effect on the propensity of whites to retire, i.e., it persists only for whites employed in the private sector of the economy. The average scores for our three age categories are 5.3, 5.5, and 5.6, respectively.

Work Attitudes

Although attitudes toward work do seem to be related to the propensity to retire, controlling for them does not help us to understand the inter-color differences in retirement propensity. For example, workers who responded that liking the work is a more important thing about a job than good wages display a lower propensity to retire (Table 6.13). This is entirely consistent with our finding that highly satisfied workers are more commonly found among men who place a higher value on liking the work.[19] However, even though a much larger proportion of whites (75 percent) than blacks (47 percent) responded "liking the work," white men have a higher propensity to retire than black men in all occupation-attitude groups (Table 6.13).

Controlling for attitude toward work partially helps to explain the higher retirement inclinations of blue collar workers vis-a-vis white collar workers. Among whites, the relationship prevails regardless of attitude, but among blacks, those blue collar workers who responded "good wages" have a lower propensity to retire than white collar workers who responded in that manner (5.3 versus 5.9). Since blacks in blue collar jobs were much more likely to respond that way than were their counterparts in white collar positions (53 percent versus 25 percent), the occupational difference among blacks is produced by the difference in attitudinal distribution of workers in the two occupation groups.

Health

As might be expected, a worker whose health imposes limitations on the kind or amount of work that he can perform tends to have a higher propensity to retire, regardless of color or occupation (Table 6.14). The effects of such health limitations on the propensity to retire are much more pronounced among blue collar workers. This association is also evident when one considers a worker's rating of his own health. Those who rated their health at the lower end of the continuum, i.e., "fair" or "poor," are more likely to have a high propensity to retire; although there is no difference in average scores among white collar workers within each color group.

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[19] See Chapter 7, page 230

Table 6.13 Propensity to Retire, by Type of Occupation and Motivation to Work: Employed Wage and Salary Workers 45-59 Years of Age, by Color

Type of occupation and motivation to work	WHITES			BLACKS		
	Total number (thousands)	Average score	Percent with high propensity	Total number (thousands)	Average score	Percent with high propensity
White collar						
Good wages	505	5.5	32	31	5.9	36
Liking the work	3,160	5.3	27	101	4.9	18
Blue collar						
Good wages	1,224	5.8	34	357	5.3	26
Liking the work	3,974	5.5	31	317	5.2	25
Service						
Good wages	140	5.8	40	65	5.4	34
Liking the work	408	5.5	32	94	5.5	32
Total (1)						
Good wages	1,869	5.7	34	453	5.4	28
Liking the work	7,542	5.4	29	512	5.2	25

(1) Total excludes 211,000 whites and 75,000 blacks employed as wage and salary farm workers.

Table 6.14 Propensity to Retire, by Type of Occupation and Two Measures of Health: Employed Wage and Salary Workers 45-59 Years of Age, by Color

Type of occupation and health measure	WHITES			BLACKS		
	Total number (thousands)	Average score	Percent with high propensity	Total number (thousands)	Average score	Percent with high propensity
Effect of health on work						
White collar						
Does not limit	3,038	5.3	27	108	5.1	22
Limits kind or amount	737	5.4	29	29	4.9	24
Blue collar						
Does not limit	4,295	5.5	30	586	5.2	25
Limits kind or amount	1,029	5.9	37	116	5.7	32
Self-rating of health						
White collar						
Excellent or good	3,212	5.3	27	106	5.1	21
Fair or poor	438	5.3	28	25	5.1	34
Blue collar						
Excellent or good	4,184	5.5	30	529	5.2	25
Fair or poor	972	5.9	37	154	5.8	37

However, irrespective of the measure used, the occupational and inter-color differences persist. In fact, controlling for health status accentuates the occupational difference in the sense that the retirement-propensity difference between blue collar and white collar workers is greater among the less-healthy members of those two occupation groups. This suggests that health limitations are more debilitating among blue collar employees. While the inter-color difference in propensity to retire is not magnified by controlling for health, neither is it diminished.

That our health measures are not merely reflections of advancing age is evident in Table 6.15.[20] Within each age group of whites and blacks, the propensity to retire increases as health deteriorates. Moreover, the propensity to retire rises consistently with age for both healthy and unhealthy white men; no age pattern being revealed among blacks. Another aspect of the relationship between health and the propensity to retire is shown in Table 6.16. The data there support the hypothesis that men in the age cohort under consideration experience difficulty in adjusting their working patterns to a health problem. Those whose health problem has existed for less than one year have relatively low propensities, probably because of the real or imagined temporariness of the condition. Those whose health problem has been with them from one to four years appear to have the strongest inclination to retire. This inclination is not as great among those with longer-term health problems. It may be that among this latter group, the limitation is accepted and adapted to; for them, the "panic" element is eliminated from retirement planning and thus the propensity to retire declines. While the data shown apply only to white men (because of the very small cell sizes for blacks), the hypotheses receive further support from the information regarding blacks with health limitations.

Other Personal Characteristics

Number of dependents The presence of dependents, other than a wife, seems to affect the retirement propensity of men 45-59 years of age. Among both whites and blacks, the propensity to retire declines as the number of dependents increases (Table 6.17). In general, the association holds within occupation-color categories. The absence of pattern among blacks in white collar occupations is most likely a result of the small sample sizes rather than the consequence of an underlying behavioral difference. The general relationship is hardly a surprising one since

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[20] Although Table 6.15 contains only the self-rating-of-health measure, entirely analogous conclusions follow from the effect-of-health-on-work variable controlled for age. That is, in all age groups the propensity to retire is higher for those whose health limits the kind or amount of work they can do than for those who are not so limited.

Table 6.15 Propensity to Retire, by Age and Self-Rating of Health: Employed Wage and Salary Workers 45-59 Years of Age, by Color

Age and self-rating of health	WHITES			BLACKS		
	Total number (thousands)	Average score	Percent with high propensity	Total number (thousands)	Average score	Percent with high propensity
45-49						
Excellent or good	3,180	5.3	27	320	5.2	21
Fair or poor	502	5.4	29	93	5.9	37
50-54						
Excellent or good	2,709	5.4	27	289	5.1	28
Fair or poor	553	5.7	35	77	5.7	39
55-59						
Excellent or good	2,144	5.5	33	199	5.2	18
Fair or poor	495	6.0	37	75	5.8	39

Table 6.16 Propensity to Retire, by Type of Occupation and Duration of Health Problem: Employed White Wage and Salary Workers with a Health Limitation, 45-59 Years of Age

Type of occupation and duration of health problem (years)	Total number (thousands)	Average score	Percent with high propensity
White collar			
Less than 1	30	5.4	28
1-4	235	5.8	35
5 or more	410	5.1	26
Blue collar			
Less than 1	56	5.2	31
1-4	321	6.5	48
5 or more	619	5.5	33
Service			
Less than 1	16	4.2	24
1-4	23	5.6	41
5 or more	130	5.3	31
Total (1)			
Less than 1	102	5.1	29
1-4	579	6.2	42
5 or more	1,159	5.3	30

(1) Total excludes 68,000 farm workers with health problem.

Table 6.17 Propensity to Retire, by Type of Occupation and Number of Dependents: Employed Wage and Salary Workers 45-59 Years of Age, by Color

Occupation and number of dependents (excluding wife)	WHITES			BLACKS		
	Total number (thousands)	Average score	Percent with high propensity	Total number (thousands)	Average score	Percent with high propensity
White collar						
None	1,304	5.7	35	49	4.9	20
1	910	5.2	25	31	5.0	19
2-3	1,147	5.2	23	35	5.4	24
4 or more	399	4.9	20	21	5.1	28
Blue collar						
None	2,182	5.8	35	247	5.6	32
1	1,305	5.6	32	143	5.2	22
2-3	1,377	5.4	25	160	5.1	22
4 or more	422	5.5	31	146	5.2	26
Total (1)						
None	3,857	5.7	35	385	5.4	29
1	2,437	5.4	29	219	5.3	26
2-3	2,676	5.3	25	253	5.2	24
4 or more	862	5.2	25	212	5.1	26

(1) Total includes service and farm workers not shown separately.

one would expect a man with dependents to be more present-oriented than future-oriented and to be less able, ceteris paribus, to accumulate assets in anticipation of the non-earning retirement years.

As might have been anticipated, controlling for the number of dependents diminishes the effect of age on the propensity to retire (Table 6.18).[21] In fact, among white men with four or more dependents, the propensity to retire actually declines with age. On the other hand, employing age as a control does not diminish the inverse relationship between number of dependents and retirement propensity, despite the obvious inverse association between age and number of dependents.

Nationality Workers whose families have lived in North America for at least three generations seem to have a lower propensity to retire than do workers of other nationality groups, regardless of age or occupation (Table 6.19). This is somewhat puzzling since "Americans" were found to exhibit weaker job attachments, which we have associated with a stronger propensity to retire.[22] Yet, the occupational difference in retirement propensity is still evident in all nationality groups, and the age effect characterizes all but those of Central or East European descent. This suggests that while the influence of ethnic origins on the propensity to retire exists, it plays a minor role.

IV.

Summary and Conclusions

The large increase in the number of older citizens in the population and the gradual reduction in the time spent at work have given rise to numerous questions related to retirement, the aging process, and societal values regarding work and leisure. For example, should retirement be compulsory or based upon individual functional capacity? What factors facilitate or impede satisfactory transition and adjustment to retirement? To what extent does technology diminish the employability of older workers? It is apparent that questions such as these have important implications both for mental and physical health of the individual and for the effective utilization of human resources by the economy.

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[21] Table 6.18 includes only whites because, as noted earlier, no age effect on the propensity to retire is discernable among blacks employed as wage and salary workers.

[22] The relation between nationality and job attachment is discussed in Chapter 5, page 161.

Table 6.18 Propensity to Retire, by Age and Number of Dependents: Employed White Wage and Salary Workers 45-59 Years of Age

Number of dependents	45-49			50-54			55-59		
	Total number (thousands)	Average score	Percent with high propensity	Total number (thousands)	Average score	Percent with high propensity	Total number (thousands)	Average score	Percent with high propensity
None	892	5.6	31	1,386	5.7	36	1,587	5.7	35
1	883	5.4	28	894	5.5	25	671	5.6	35
2-3	1,442	5.3	25	854	4.7	23	380	5.3	24
4 or more	581	5.3	26	222	5.1	23	57	5.0	26

Table 6.19 Propensity to Retire, by Type of Occupation and Nationality: Employed White Wage and Salary Workers 45-59 Years of Age

Nationality	White collar			Blue collar			Total(1)		
	Total number (thousands)	Average score	Percent with high propensity	Total number (thousands)	Average score	Percent with high propensity	Total number (thousands)	Average score	Percent with high propensity
U. S. or Canada	1,647	5.2	26	2,379	5.4	29	4,385	5.4	28
North or West Europe	1,260	5.5	27	1,466	5.7	32	2,945	5.6	30
Central or East Europe	407	5.4	29	571	5.9	41	1,020	5.7	37
Other	271	5.4	28	520	5.7	34	816	5.6	32

(1) Total includes service and farm workers not shown separately.

The most widespread plan to provide for the exigencies of the retirement years is, of course, Social Security. In addition, however, nearly two-thirds of all men in the age cohort under discussion are eligible for some other type of pension benefits. Almost one-half of the men in this age group face compulsory retirement, usually at age 65. Virtually all of the differences in coverage between whites and blacks are attributable to inter-color differences in occupational and industrial distribution.

An intriguing finding of this chapter is that black men in this age cohort appear to have a lower propensity to retire than white men. This difference persists whether we control for family assets, occupation, pension eligibility, tenure, or work attitudes. It is possible that it would have disappeared had we been able to control simultaneously for all of those factors. This is a matter which we expect to explore more fully later with multivariate analysis. Nevertheless, it is rather startling that the gross difference in attitude toward retirement should exist between whites and blacks, because it is the opposite of the gross difference between the two color groups in actual labor force participation.

It may be that these attitudinal variations are attributable to varying cultural forces which have led to actual differences between whites and blacks in their perception of the work role and in the extent to which they plan for retirement. It is possible, at least for employed blacks, that discriminatory practices may be less intense on the job than in other aspects of life where things to do and facilities (e.g., housing, recreation, travel) are quite inadequate or simply unavailable to blacks. Hence, the stronger attachment of employed blacks to a work-oriented life may be a reflection of a preference to avoid stronger forms of discrimination that prevail away from work.

In addition to the above inter-color difference, we find the following correlates to be positively associated with a high propensity to retire: older age, greater pension eligibility, higher family assets, longer service on current job, poor health, and a small number of dependents. There is also evidence that blue collar workers and government employees have higher propensities to retire than do white collar workers and private-sector employees, respectively.

Chapter 7*

WORK ATTITUDES

The attitudes of men toward work in general and toward their jobs in particular are of importance from several points of view. For one thing, they may be presumed to influence the degree of attachment to current jobs, and thus of prospective mobility within the labor market, a subject discussed in Chapter 5. Second, some of these attitudes measure the strength of commitment to work itself, and are thus related to the question of retirement, which was considered in Chapter 6. Finally, work attitudes are of interest in their own right, for they tell us something about the degree to which the psychological needs of man are being satisfied by the existing pattern of work opportunities. It is to this question that the present chapter is directed. Several dimensions of work attitudes are explored: (1) strength of commitment to work, (2) relative importance of financial rewards versus intrinsic satisfaction, (3) degree of satisfaction with present job, and (4) factors in satisfaction and dissatisfaction with present job. We examine the relationship of these attitudes to such personal characteristics as age, color, education, and health and to such employment characteristics as occupation, industry, rate of pay, and length of service.

I.

Commitment to Work

While wages, salaries, and other work-related incomes are surely the principal means of livelihood for most people, it is not entirely certain how great a part economic reward plays in an individual's motivation to work. In an effort to ascertain the importance of economic motivation in a man's thinking about work, we asked the following hypothetical question of all respondents who were members of the labor force: "If, by some chance, you were to get enough money to live comfortably without working, do you think you would work any way?" Over three-fourths of our cohort of white men stated that they would choose to work under those circumstances, and the proportion of black men is only slightly smaller (Table 7.1).

Occupation and Age

There is variation by occupation in the willingness men express to

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* This chapter was written by Ruth S. Spitz.

Table 7.1 Proportion of Men Who Would Work if They Received Enough Money to Live On without Working, by Major Occupation Group: Men in the Labor Force, 45-59 Years of Age, by Color

Major occupation group	WHITES		BLACKS	
	Total number (thousands)	Percent who would work	Total number (thousands)	Percent who would work
Major occupation group				
White collar	5,092	82	191	81
Professional and technical	1,439	86	57	91
Nonfarm managers and proprietors	2,280	81	55	81
Clerical	685	73	60	69
Sales	688	82	19	92
Blue collar	5,939	73	756	72
Craftsmen and foremen	3,167	75	166	72
Operatives	2,209	69	344	68
Nonfarm laborers	564	72	246	77
Service	657	72	182	66
Farmers and farm managers	893	89	60	88
Farm laborers	211	88	75	79
Total or average	12,826	78	1,269	74

continue working even in the absence of financial need, although the proportion does not fall below two-thirds in any occupation group among whites or blacks. In the case of nonagricultural workers, the proportion who express a desire to continue working varies directly with the socioeconomic level of occupation. For example, among whites the proportion ranges between 86 percent for professionals and 69 percent for operatives and 72 percent for laborers. The pattern among black workers outside of agriculture is similar. Farmers and farm laborers in both color groups have above-average proportions who said that they would continue to work. Indeed, in the case of white men, these two occupation groups have higher proportions (89 and 88 percent, respectively) than any other category.

Among employed wage and salary workers the willingness to work, in the absence of financial need, varies inversely with age (Table 7.2). This drop in the inclination to work is greatest between those in their late forties and early fifties, the difference being much smaller among whites and in the opposite direction among blacks as between those in their early and late fifties.

Table 7.2 Proportion of Men Who Would Work if They Received Enough Money to Live On without Working, by Age: Employed Wage and Salary Workers 45-59 Years of Age, by Color

Age	WHITES		BLACKS	
	Total number (thousands)	Percent who would work	Total number (thousands)	Percent who would work
45-49	3,840	79	431	76
50-54	3,376	74	380	69
55-59	2,726	72	281	70
Total or average	9,942	75	1,092	71

Health

As would be expected, willingness to work varies with a man's rating of his health (Table 7.3). For the total cohort and for virtually every occupation-color group, those who rate their health as "excellent" are more willing to work if not in financial need than those in "fair" or "poor" health. The influence of the health factor on willingness to work is somewhat greater for blacks than for whites. It is interesting to note that the influence of health on work plans is noticeably weaker among white collar workers than among other types of workers, which doubtless results, at least partially, from the generally more sedentary or less physically demanding nature of white collar work.

Table 7.3 Proportion of Men Who Would Work if They Received Enough Money to Live On without Working, by Type of Occupation and Self-Rating of Health: Men 45-59 Years of Age, in the Labor Force, by Color

Type of occupation and self-rating of health	WHITES		BLACKS	
	Total number (thousands)	Percent who would work	Total number (thousands)	Percent who would work
White collar	5,092	82	191	81
Excellent	2,106	83	84	80
Good	2,174	81	56	87
Fair or poor	634	81	42	74
Blue collar	5,939	73	756	72
Excellent	1,992	76	257	75
Good	2,615	73	302	72
Fair or poor	1,119	66	171	65
Service	657	72	182	66
Excellent	228	67	71	70
Good	292	70	70	71
Fair or poor	92	71	36	49
Farm	1,104	89	135	83
Excellent	239	90	20	89
Good	468	92	51	88
Fair or poor	359	85	62	80
Total	12,826	78	1,269	74
Excellent	4,591	80	431	76
Good	5,556	78	482	75
Fair or poor	2,204	74	312	68

II.

Motivation to Work

Turning now from their general orientation toward work, we inquire into the attitudes of men 45-59 years of age regarding extrinsic versus intrinsic rewards in employment. All respondents who had ever worked were asked the question: "What would you say is the more important thing about any job -- good wages or liking the kind of work you are doing?"

Occupation

A large majority of men claim that liking the work takes priority in their set of values over good wages (Table 7.4). It should be added that color makes a vast difference when we measure the extent of this preference. Over four-fifths of white workers value liking the work, but this is true of only slightly over half of the blacks. Preference for liking the work over wages is notably greater among white collar workers than among blue collar workers, and this holds for blacks as well as whites. However, the inter-color difference is so marked that black men who hold white collar jobs are less likely to prefer the intrinsic reward than are white men in blue collar jobs. Among blacks, a majority of the total blue collar group chooses good wages over liking the work.

Educational Attainment

The more education a man has, the more likely he is to prefer intrinsic to extrinsic rewards in his work (Table 7.4). This is true among both blue and white collar workers and for black men and white men alike. Yet, while the proportion of white men choosing good wages drops 13 percentage points as between those with only elementary schooling and those with some college, among blacks the drop is 39 percentage points. Education, then, has a much greater influence on the work values of black than of white men. The greatest inter-color differential in work values is found among blue collar workers with eight years or less of schooling. The smallest difference is among white collar workers who have been to college.

III.

Job Satisfaction

The vast majority of employed men between the ages of 45 and 59 have favorable attitudes toward their jobs. Over nine-tenths of both the whites and the blacks report liking their jobs either very much or fairly well.

Table 7.4 Proportions Choosing Good Wages or Liking the Work as Motivation to Work, by Type of Occupation and Years of School Completed: Men 45-59 Years of Age with Work Experience, by Color

(Percentage distribution)

Motivation to work	White collar					Blue collar					Total(1)				
	8 or less	9-11	12	13 or more	Total	8 or less	9-11	12	13 or more	Total	8 or less	9-11	12	13 or more	Total
	WHITES														
Good wages	21	14	14	11	14	26	24	19	13	23	25	20	16	12	19
Liking the work	79	86	86	89	86	74	76	81	87	76	75	80	84	88	81
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	678	909	1,551	2,114	5,270	3,105	1,628	1,341	279	6,395	4,840	2,897	3,262	2,534	13,608
	BLACKS														
Good wages	42	36	24	17	28	57	42	46	25	53	57	39	31	18	48
Liking the work	58	64	76	83	72	43	58	54	75	47	43	61	69	82	52
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	44	37	48	63	199	596	156	70	15	837	916	232	155	89	1,400

(1) Total includes service and farm workers not shown separately.

Our finding that only 7 percent of employed men express some dislike for their jobs is lower than the 13 percent median number of dissatisfied workers reported in Blauner's summaries of recent studies and the 12 to 13 percent median reported in Personnel and Guidance Journal summaries.[1] Yet, we should expect a difference in this direction for our age group of men, since Herzberg reports that job morale hits a low among workers in their mid-twenties to early thirties, and subsequently increases steadily with age.[2] Moreover, there has been such great diversity among different studies in the methods of defining and measuring job satisfaction that there is no reason to expect them to yield identical measurements.[3] Well over half of all employed older men are highly satisfied with their jobs (Table 7.5). Nearly three-fifths of whites like their jobs very much, while the proportion of black men in this category is just over half.

Occupation and Age

It comes as no surprise to find that the higher a man's occupational level the greater is his job satisfaction. As nearly all studies have reported, a greater proportion of white collar workers than of men in other occupational categories are highly satisfied with their jobs. Among white men, the professional, managerial, and sales occupational categories have the largest proportions of highly satisfied workers--over two-thirds in each case. Clerical workers, craftsmen, service workers, and farmers fall into a middle category, with between 51 and 56 percent of their members expressing high satisfaction. Operatives and both farm and nonfarm laborers are the only categories with under 50 percent reporting high satisfaction (about 46 percent). Among black men, the pattern is roughly similar, except that farmers and farm managers have the smallest proportion of highly satisfied workers--43 percent and 30 percent, respectively.

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[1] Robert Blauner, "Extent of Satisfaction: A Review of General Research" in Costello and Zalkind, Psychology in Administration (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963), Chapter 3; Personnel and Guidance Journal annual reports on job satisfaction research, 1964 and 1965, as cited in Manpower Report of the President (April, 1968), p.48.

[2] Frederick Herzberg and others, Job Attitudes: Review of Research and Opinion (Pittsburgh: Psychological Service of Pittsburgh, 1957), p. 6.

[3] Victor H. Vroom, Work and Motivation (New York: John Wiley and Sons, Inc., 1964), p. 100.

Table 7.5 Proportion of Men Highly Satisfied with Job, by Age and Major Occupation Group: Employed Men 45-59 Years of Age, by Color

Major occupation group	45-49		50-54		55-59		Total	
	Total number (thousands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much
	WHITES							
White collar	1,908	67	1,731	67	1,426	73	5,065	69
Professional and technical	590	71	430	66	419	77	1,439	71
Nonfarm managers and proprietors	734	68	853	70	677	78	2,264	72
Clerical	303	59	212	61	163	40	678	55
Sales	281	66	236	66	167	73	684	68
Blue collar	2,291	48	1,994	48	1,539	55	5,824	50
Craftsmen and foremen	1,286	50	1,011	51	820	60	3,118	53
Operatives	863	45	743	43	560	52	2,167	46
Nonfarm laborers	142	42	240	49	158	46	540	46
Service	229	54	207	41	206	57	643	51
Farmers and farm managers	266	57	310	49	313	61	890	56
Farm laborers	45	46	79	59	83	36	207	47
Total or average	4,751	56	4,333	56	3,570	62	12,655	58
	BLACKS							
White collar	96	63	53	76	40	70	190	68
Professional and technical	34	76	15	91	9	100	57	84
Nonfarm managers and proprietors	22	46	17	81	16	62	54	61
Clerical	34	58	15	64	10	69	59	61
Sales	7	75	6	57	6	50	19	61
Blue collar	296	44	257	51	186	53	738	49
Craftsmen and foremen	69	46	57	58	36	56	162	52
Operatives	138	47	121	48	75	56	334	49
Nonfarm laborers	88	38	79	52	75	49	242	46
Service	57	63	60	51	59	52	176	55
Farmers and farm managers	19	12	23	64	18	50	60	43
Farm laborers	15	24	31	28	27	35	73	30
Total or average	483	48	426	53	331	53	1,240	51

While a somewhat smaller proportion of black men than of white men are highly satisfied with their jobs, this inter-color differential of 7 percentage points seems to be accounted for largely by differences in the occupational composition of the two groups and by the substantially lower degree of job satisfaction among black than among white farmers and farm laborers. The latter difference probably reflects considerable differences between the two color groups in the economic status of those occupational categories. Irrespective of color, men in their late fifties are somewhat more likely to be highly satisfied with their jobs than those in their late forties, the difference being about 6 percentage points, and this relationship is also evident for most occupations.

Educational Attainment

Only among white men who are white collar workers is there a rather clear positive relationship between educational attainment and degree of job satisfaction. In that case, the proportion of highly satisfied workers rises from 62 percent among those with less than nine years of education to 72 percent among those with some college (Table 7.6). The high degree of association between education and the gross occupational categories used in the analysis makes it unclear whether education exerts an influence independent of occupation. One would hypothesize an interaction between the two variables such that those whose educational level is "inappropriate" for the occupation would be less likely to be highly satisfied. The evidence described above with respect to the white men in white collar occupations is consistent with this hypothesis. The inverse relation between educational attainment and degree of satisfaction among black men in blue collar work (except for those with some college, where the numbers are too small to be reliable) is also consistent with the hypothesis, if one assumes that the "appropriate" amount of education for such jobs is probably less than completion of high school.

Length of Service

For our total white cohort the proportion of workers who like their jobs very much falls into a roughly U-shaped pattern with respect to length of service, thereby confirming the findings of other studies on this subject (Table 7.7).[4] For both white collar and blue collar workers, the proportion of highly satisfied workers is high among those with less than one year of service, drops among those with between one and nine years of service, then rises again among those with ten or more years. Among blacks, however, there is a rather direct relationship between length of service and high degree of job satisfaction. This is so, at

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[4] Herzberg et al, op.cit., pp. 11-13.

Table 7.6 Proportion of Men Highly Satisfied with Job, by Type of Occupation and Years of School Completed: Employed Men 45-59 Years of Age, by Color

Occupation and years of school completed	WHITES		BLACKS	
	Total number (thousands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much
White collar	5,065	69	190	68
8 or less	637	62	41	68
9-11	827	64	37	68
12	1,508	67	46	60
13 or more	2,080	72	60	70
Blue collar	5,824	50	738	49
8 or less	2,750	51	516	50
9-11	1,500	48	142	48
12	1,271	49	67	35
13 or more	264	49	14	54
Total(1)	12,655	58	1,240	51
8 or less	4,220	55	786	50
9-11	2,788	51	215	49
12	3,123	58	147	47
13 or more	2,460	69	83	64

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(1) Total includes service and farm workers not shown separately.

Table 7.7 Proportion of Men Highly Satisfied with Job, by Type of Occupation and Length of Service in Current Job: Employed Men 45-59 Years of Age, by Color

Length of service in current job (years)	White collar		Blue collar		Total(1)	
	Total number (thousands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much
Less than 1	333	69	808	54	1,319	57
1-2	400	54	425	44	900	51
3-4	399	65	371	47	893	56
5-9	782	64	774	45	1,745	55
10-19	1,353	70	1,586	50	3,325	60
20-29	1,158	70	1,267	51	2,875	58
30 or more	613	75	552	50	1,503	61
Total or average	5,065	68	5,824	49	12,655	58
Less than 1	14	57	110	31	173	35
1-2	14	50	60	38	101	39
3-4	18	61	64	50	114	48
5-9	26	73	86	40	148	49
10-19	52	56	230	54	361	56
20-29	53	79	150	56	258	60
30 or more	11	73	35	54	80	59
Total or average	190	66	738	48	1,240	51

(1)Total includes service and farm workers not shown separately.

least, for those in blue collar jobs. The number of short-service workers in white collar jobs is too small to test the relationship.

The U-shaped relationship between length of service and job satisfaction is usually explained as follows. Workers evidence optimism, enthusiasm, and hence a high amount of job satisfaction when starting a new job, but lose some of that initial enthusiasm by the end of the first year, as jobs become more routine. The greatest proportion of voluntary quits occur during that first year, but even among those who remain there is a continued awareness of frustration and grievances during the next several years. However, after a decade or more on the job, workers' seniority and age give them a degree of security and status which produces greater company identification and increasing job satisfaction.[5] It should be noted that there is a circularity of influence in the relationship between length of service and job satisfaction. First, a high degree of satisfaction makes it more likely that the worker will attain a long-tenure position on his job. On the other hand, increased length of service is usually accompanied by greater familiarity with the job environment, one's fellow workers and one's supervisors; all of which result in greater job satisfaction.

Industry

There is considerable variation in job satisfaction among industries, much of which is doubtless a reflection of industry differences in occupational structure (Table 7.8). While 70 percent of white men in finance and 65 percent in services are highly satisfied, the proportion is smallest in manufacturing and agriculture, where slightly over half say that they like their jobs very much. Among blacks the proportion with great job satisfaction varies more substantially among industries, from a high in services of 58 percent to a low in agriculture of 37 percent. Some inter-color difference in job satisfaction persists within every industry, and is as much as 27 percentage points in finance, 17 points in agriculture, and 13 points in construction. This suggests that the differences in occupational structure between white and black men are more pronounced in those industry divisions than in others. In several industries--manufacturing, transportation, and public administration--there is almost no inter-color difference in job satisfaction.

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[5] Ibid., pp. 11-12.

Table 7.8 Proportion of Men Highly Satisfied with Job by Major Industry Division: Employed Men 45-59 Years of Age, by Color

Major industry division	WHITES		BLACKS	
	Total number (thousands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much
Agriculture	1,118	54	143	37
Mining, forestry fisheries	143	60	14	48
Construction	1,334	60	157	47
Manufacturing	3,815	52	352	51
Transportation and public utilities	1,198	56	131	55
Wholesale and retail trade	1,987	61	129	54
Finance, insurance, real estate	507	70	38	43
Services	1,618	65	184	58
Public administration	919	61	92	58
Total	12,655	58	1,240	51

Health

The healthy worker is more likely to be well satisfied with his job. Moreover, this relationship exists whether health is measured by the more subjective query, "Would you rate your health, compared to other men of about your age, as excellent, good, fair, or poor?," or whether it is measured by the reply to the relatively objective question, "Does your health or physical condition (a) keep you from working? (b) limit the kind of work you can do? or (c) limit the amount of work you can do?"

Those workers who rate their health excellent are much more likely to be very fond of their jobs than those who rate th[illegible]ealth "fair" or "poor" (Table 7.9). High job satisfaction is associ[illegible] with a man's estimate of his physical well-being regardless of color, and in almost all major types of occupations.

It is interesting to note that the greater proportion of highly satisfied men in white collar occupations than in other types of work is maintained when we control for health. Thus, irrespective of color, and of self-rating of health, white collar workers are much more likely than blue collar, service, or farm workers to like their jobs very much. The

Table 7.9 Proportion of Men Highly Satisfied with Job, by Type of Occupation and Self-Rating of Health: Employed Men 45-59 Years of Age, by Color

Type of occupation and self-rating of health	WHITES		BLACKS	
	Total number (thousands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much
White collar	5,065	69	190	68
Excellent	2,094	77	84	66
Good	2,162	64	55	80
Fair or poor	634	57	41	54
Blue collar	5,824	50	738	49
Excellent	1,963	56	254	56
Good	2,557	48	295	46
Fair or poor	1,094	39	164	42
Service	643	51	176	55
Excellent	228	51	68	57
Good	281	60	69	53
Fair or poor	88	34	35	59
Farm	1,097	54	133	36
Excellent	239	68	20	42
Good	468	51	50	37
Fair or poor	352	48	60	29
Total	12,655	58	1,240	51
Excellent	4,543	66	425	58
Good	5,476	55	472	50
Fair or poor	2,168	46	301	43

only exception to this tendency appears among black service workers, where our sample is too small to be conclusive.

When health and physical condition are measured in terms of their affects on ability to work, the same relationships prevail, although they are somewhat less pronounced (Table 7.10). There is a difference of 20 percentage points for whites and 14 for blacks in the proportions of highly satisfied workers between those who rate their health as "excellent" and those who rate it as "fair" or "poor" (Table 7.9). However, the proportion of those who like their jobs very much among white men without any limiting health condition is only 5 percentage points more than the proportion of those whose health limits the kind or amount of work they can do, and the corresponding difference for blacks is 6 percentage points.

Rate of Pay

The expected positive relationship between rate of pay and high job satisfaction is demonstrated clearly among employed men (Table 7.11). The relationship prevails among white men in both white and blue collar occupations. Among blacks, it is also evident for blue collar workers, except for a drop in the proportion of highly satisfied workers in the highest earnings category, which may be attributable to the small sample size in that category. The number of black men in white collar occupations is too small to produce reliable figures on the relation between wages and satisfaction.

IV.

Factors in Job Satisfaction and Dissatisfaction

Factors Liked in Current Job

Rather than a single quality, job satisfaction can be regarded as a complex of a number of component variables, as worker reaction to the several relatively distinct dimensions of the work role. These job dimensions have been grouped in the literature as "intrinsic" or "motivation" and "extrinsic" or "hygiene" job factors. Intrinsic factors relate directly to aspects of the work itself -- recognition, responsibility, and other factors relating to job content or inherent in the nature of the occupation. Extrinsic factors relate to the job environment, such as wages, hours, security, physical working conditions, supervision, or management policies. A substantial number of studies have appeared in the past decade investigating the relationship between these extrinsic and intrinsic job dimensions and job satisfaction and dissatisfaction. Many of these have been designed to test the Herzberg thesis that

Table 7.10 Proportion of Men Highly Satisfied with Job, by Type of Occupation and Effect of Health on Work: Employed Men 45-59 Years of Age, by Color

Type of occupation and effect of health on work	WHITES		BLACKS	
	Total number (thousands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much
White collar	5,065	69	190	68
Limits kind or amount	1,043	66	41	63
Does not limit	4,007	70	145	70
Blue collar	5,824	50	738	49
Limits kind or amount	1,184	47	127	43
Does not limit	4,610	51	608	50
Service	643	51	176	55
Limits kind or amount	196	42	35	54
Does not limit	439	55	141	56
Farm	1,097	54	133	36
Limits kind or amount	372	53	49	33
Does not limit	718	54	84	37
Total(1)	12,655	58	1,240	51
Limits kind or amount	2,795	54	254	46
Does not limit	9,800	59	979	52

(1) Total includes those whose health "prevents" working.

Table 7·11 Proportion of Men Highly Satisfied with Job, by Hourly Rate of Pay in Current Job and Type of Occupation: Employed Wage and Salary Workers,(1) 45-59 Years of Age, by Color

Occupation	Less than $2.00		$2.00 to $2.99		$3.00 to $3.99		$4.00 or more		Total	
	Total number (thouands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much
	WHITES									
White collar	308	57	765	63	895	66	1,625	74	3,787	68
Blue collar	742	45	1,759	46	1,776	52	957	56	5,347	50
Total(2) or average	1,485	50	2,762	51	2,762	57	2,627	67	9,932	57
	BLACKS									
White collar	29	83	47	72	35	51	23	65	141	68
Blue collar	293	37	214	54	148	63	29	48	705	48
Total(2) or average	484	42	333	57	188	62	55	58	1,091	51

(1) Excludes operators of small incorporated family enterprises.

(2) Total includes service and farm workers not shown separately.

intrinsic job factors are the primary determinants of job satisfaction and that extrinsic job factors are the major cause of job dissatisfaction.[6]

All of our employed respondents were asked "What are the things you like best about your job?" On the basis of the first-mentioned responses, a very substantial majority -- nearly two-thirds of our cohort of white men -- claim that the best factor about their job is some intrinsic quality (Table 7.12).[7]

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6. See, among other: Frederick Herzberg, Bernard Mausner, and Barbara Snyderman, The Motivation to Work (New York: John Wiley and Sons, Inc., 1959); Robert Bloom and John R. Barry, "Determinants of Work Attitudes Among Negroes," Journal of Applied Psychology, Vol. 51 (June, 1967), pp. 291-94; Richard Centers and Daphne E. Bugental, "Intrinsic and Extrinsic Job Motivations Among Different Segments of the Working Population, Journal of Applied Psychology, Vol. 50 (June, 1966), pp. 193-97; Robert House and Lawrence Wigdor, "Herzberg's Dual-Factor Theory of Job Satisfaction and Motivation: A Review of the Evidence and a Criticism," Personnel Psychology, Vol. 20 (Winter, 1967), pp. 369-89; Carl A. Lindsay and others, "The Herzberg Theory: A Critique and Reformulation," Journal of Applied Psychology, Vol. 51 (August, 1967), pp. 330-39; Paul T. Wernimont, "Intrinsic and Extrinsic Factors in Job Satisfaction," Journal of Applied Psychology, Vol. 50 (January, 1966), pp. 41-50.

7 While we obtained three answers from each respondent, first-mentioned ones are used here for convenience. There is no substantive difference between the conclusions derivable from the first-mentioned responses and conclusions based on the percentage distribution of all responses, as the following table indicates.

	Whites		Blacks	
Factor liked best about job	First response	All responses	First response	All responses
Nature of work	59.1	52.2	37.7	37.1
Ability to do work	3.9	4.0	9.0	9.6
Other intrinsic	2.0	2.4	2.1	2.1
Advancement	0.0	0.2	0.2	0.0
Wages	10.1	9.9	13.2	10.7
Security	4.4	4.4	5.3	4.5
Fringe benefits	1.0	2.6	1.7	3.2
Hours of work	4.5	5.1	5.4	4.6
Physical environment	5.1	6.1	6.0	7.2
Supervision	4.8	5.9	11.0	11.4
Fellow workers	2.2	4.0	3.9	4.9
Other extrinsic	1.3	2.3	1.5	1.9
Unclassifiable	0.2	0.3	0.1	0.3
Nothing	1.5	0.6	2.9	2.4
Total	100.0	100.0	100.0	100.0

Table 712 Type of Factor Liked Best About Job, by Major Occupation Group: Employed Men 45-59 Years of Age, by Color

(Percentage distribution)

Factor liked best	White collar					Blue collar				Service	Farmers and farm managers	Farm laborers	Total
	Professional and technical	Nonfarm managers proprietors	Clerical	Sales	Total	Craftsmen and foremen	Operatives	Nonfarm laborers	Total				
						WHITES							
Intrinsic	79	83	51	82	78	58	47	35	52	59	88	53	65
Nature of work	77	79	48	80	75	52	39	22	44	49	79	41	59
Other Intrinsic	2	4	3	2	3	6	8	13	8	10	9	12	6
Extrinsic	20	16	48	17	21	41	51	58	46	40	11	44	33
Wages and fringe benefits	5	7	13	7	7	15	18	15	16	8	4	9	11
Security	2	2	12	0	3	5	7	6	6	9	1	4	4
Hours	2	2	6	2	3	5	8	6	6	9	1	10	4
Physical working conditions	4	1	6	3	3	6	8	12	7	3	4	7	5
Supervision	2	2	7	4	3	6	7	9	7	7	0	11	5
Other extrinsic	4	2	5	1	2	4	5	10	5	4	1	3	4
Nothing	1	1	1	1	1	1	2	7	2	1	1	2	2
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,439	2,264	678	684	5,065	3,118	2,167	540	5,824	643	890	207	12,655
						BLACKS							
Intrinsic	79	81	55	74	71	51	37	40	41	46	80	58	49
Nature of work	76	75	47	74	66	41	25	25	28	33	70	41	38
Other intrinsic	3	6	8	0	5	10	12	15	13	12	10	16	11
Extrinsic	21	18	44	22	28	48	59	56	56	52	19	37	48
Wages and fringe benefits	10	5	18	13	11	17	19	19	19	12	3	4	15
Security	0	4	6	0	3	3	8	6	6	6	1	1	5
Hours	1	2	6	4	3	6	6	8	6	7	0	1	5
Physical working conditions	1	2	7	0	3	8	6	4	6	6	7	14	6
Supervision	4	2	4	0	3	12	13	13	13	12	1	16	11
Other extrinsic	5	4	4	4	4	2	6	5	5	9	6	1	5
Nothing	0	1	1	4	1	1	4	4	2	2	1	6	3
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	57	54	59	19	190	162	334	242	738	176	60	73	1,240

The only extrinsic factor cited by as many as a tenth of the men is wages. Security, hours, supervision, and physical working conditions are each mentioned by about 5 percent of the white men.

Black men differ substantially from white men in the kinds of factors they like about their jobs. They are almost exactly equally divided between those who choose an intrinsic factor (49 percent) and those who choose an extrinsic factor (48 percent). Important extrinsic factors cited favorably by blacks are wages and fringe benefits (15 percent) and supervision, management, or company policies (11 percent). Thus, blacks are more than twice as likely as whites to cite supervision and are also more likely to mention wages.

Occupation As would be expected, the factors about their jobs that appeal to men vary considerably from one occupational group to another (Table 7.12). Among white men, the greatest affinity for intrinsic job factors is expressed by farm managers (88 percent), followed by nonfarm managers, salesmen, and professional men. Four-fifths of each of these groups cite intrinsic factors. Blue collar workers are much less likely to mention intrinsic factors as reasons for liking their jobs (52 percent), and the proportions within this group decline from 58 percent among craftsmen to 35 percent among laborers. Among black men, the pattern is not greatly different from that among whites. The proportion of individuals citing intrinsic factors as reasons for liking their jobs ranges from a high of 81 percent of managers to a low of 37 percent of operatives.

Wages is the extrinsic quality cited most frequently by men in all occupation groups except farm workers. Supervision, management, or company policies is generally the next most frequently mentioned extrinsic factor. It is important to note that, while white and black men in the aggregate differ greatly in the proportion who find intrinsic factors attractive in their jobs, when we control for occupation this color difference becomes much less pronounced. For example, among professionals, the proportions are identical in the two color groups. In none of the three blue collar groups is there more than a 10 percentage point difference between the two color groups.

Industry As might be expected from the preceding occupational data, the industries with the largest proportions of men favoring some intrinsic job factor are those employing high proportions of farm and white collar workers: agriculture, service, finance, wholesale and retail trade, and public administration (Table 7.13). Over three-fifths of whites and over half of blacks in these industries like some intrinsic job characteristic best. Industries employing the greatest percentage of men (50 percent or more) who like an extrinsic job quality best are mining for both whites and blacks, and transportation, construction, and manufacturing for blacks.

Educational attainment Within broad categories of occupation, educational attainment is positively related to liking a job particularly for intrinsic reasons (Table 7.14). Among white men the relationship is

Table 7.13 Type of Factor Liked Best About Job, by Major Industry Division: Employed Men 45-59 Years of Age, by Color

(Percentage distribution)

Factor liked best	Agriculture	Mining, forestry, and fisheries	Construction	Manufacturing	Transportation and public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Service	Public administration	Total
					WHITES					
Intrinsic	81	38	59	57	56	72	77	77	61	65
Nature of work	72	30	51	51	49	69	72	71	57	59
Other intrinsic	10	8	8	6	7	4	5	6	4	6
Extrinsic	19	63	39	41	42	26	23	22	36	33
Wages and fringe benefits	5	14	18	14	16	7	7	5	8	11
Security	2	8	3	5	6	3	3	4	9	4
Hours	3	8	3	6	6	3	6	4	4	4
Physical working conditions	5	15	5	6	7	4	4	2	5	5
Supervision	2	8	5	5	5	7	2	3	5	5
Other extrinsic	2	10	5	4	2	2	2	4	5	4
Nothing	1	0	1	2	1	1	0	1	2	2
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,118	143	1,334	3,815	1,198	1,987	507	1,618	919	12,655
					BLACKS					
Intrinsic	67	41	44	40	35	52	57	61	58	49
Nature of work	53	36	33	25	28	42	51	54	45	38
Other intrinsic	13	5	11	14	7	10	6	8	12	11
Extrinsic	30	53	53	57	62	46	43	36	40	48
Wages and fringe benefits	3	27	22	21	20	10	15	7	14	15
Security	2	0	6	7	8	4	0	3	10	5
Hours	2	0	3	5	8	6	12	7	7	5
Physical working conditions	11	16	5	7	4	6	4	4	2	6
Supervision	9	5	14	11	16	14	2	9	5	11
Other extrinsic	3	5	4	6	6	6	10	6	4	5
Nothing	4	5	4	3	4	2	0	3	2	3
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	143	14	157	352	131	129	38	184	92	1,240

Table 7.14 Proportions Liking Intrinsic and Extrinsic Factors Best in Current Job, by Type of Occupation and Years of School Completed: Employed Men 45-59 Years of Age, by Color

Type of occupation and years of school completed	WHITES			BLACKS		
	Total number (thousands)	Intrinsic	Extrinsic	Total number (thousands)	Intrinsic	Extrinsic
White collar	5,065	78	21	190	71	28
8 or less	637	71	26	40	69	29
9-11	827	75	25	37	66	34
12	1,508	74	25	46	64	36
13 or more	2,080	83	16	60	76	24
Blue collar	5,824	52	46	738	41	56
8 or less	2,750	49	49	516	40	57
9-11	1,500	49	49	142	48	49
12	1,271	57	41	67	37	60
13 or more	264	64	35	13	23	54
Total (2)	12,655	65	33	1,240	49	48
8 or less	4,339	57	40	789	47	50
9-11	2,669	60	39	216	50	49
12	3,123	68	30	147	50	49
13 or more	2,463	80	19	82	68	29

(1) Percentages total less than 100 because the table excludes respondents who were unable to mention any factor as the one liked best.

(2) Total includes service and farm workers not shown separately.

especially pronounced when one compares white collar workers with and without some college training; and when one compares blue collar workers who are high school graduates with those who are not. Among blacks the relationship is similar to that of whites for workers in white collar occupations, but is reversed for those in blue collar occupations.

Factors Disliked in Current Job

All employed respondents were asked "What are the things about your job that you don't like so well?" and responses were coded and tabulated in the same way as the factors which respondents liked best. From Table 7.15, it is clear that men are more inclined to dislike an extrinsic than an intrinsic job characteristic: half again as likely in the case of whites and twice as likely in the case of blacks. For the entire cohort of men, there is no inter-color difference in the proportion who dislike an extrinsic factor --44 percent of whites and 43 percent of blacks. Whites, however, are more likely than blacks to mention an intrinsic factor. It is significant also to note that a substantial segment of men (one-fourth of the whites and over one-third of the blacks) is unable (or unwilling) to name any job characteristic disliked.

Occupation In certain occupational categories the inclination to dislike extrinsic elements is particularly strong (Table 7.15). White men in blue collar occupations have attitudes similar to the total group of blacks: they dislike extrinsic qualities more frequently and intrinsic factors less frequently than do other white men. Dislike of extrinsic factors appears particularly strong among white operatives, craftsmen, and farmers, and among black proprietors and operatives.

The extrinsic factors most frequently disliked by whites involve hours of work. This is mentioned by a fifth of white managers and salesmen, and a tenth or more of virtually every other occupation group of white men. Among blue collar workers, dislike of hours takes second place to dissatisfaction with physical working conditions; 15 percent of the group express distaste for this feature of their jobs. Among black men, on the other hand, wages and fringe benefits are the extrinsic job characteristics most frequently disliked, accounting for one-fifth of farm laborers and more than one-tenth of service workers, craftsmen, clerical workers, operatives, and nonfarm laborers. It is clear from Table 7.15 that the extrinsic job-dislikes of whites and blacks are much more similar among white collar workers than among blue collar workers.

Of the men who dislike an intrinsic quality of their jobs, (three-tenths of the whites and one-fifth of the blacks), about two-thirds fall in the "other intrinsic" category. This includes such distasteful job aspects as "working outdoors in bad weather" (by construction laborers), "too much travel away from home" (by salesmen), "too much paper work" (by proprietors), or "not enough responsibility."

Table 7.15 Type of Factor Liked Least About Job, by Major Occupation Group: Employed Men 45-59 Years of Age, by Color

(Percentage distribution)

Factor liked least	White collar					Blue collar				Service	Farmers and farm managers	Farm laborers	Total
	Professional and technical	Nonfarm managers, proprietors	Clerical	Sales	Total	Craftsmen and foremen	Operatives	Nonfarm laborers	Total				
						WHITES							
Intrinsic	38	41	32	34	38	26	20	27	24	28	38	27	31
Nature of work	14	13	14	10	13	9	7	7	8	8	13	6	10
Other intrinsic	24	28	17	24	25	17	14	20	16	20	25	21	21
Extrinsic	41	35	42	42	39	47	52	41	49	41	49	46	44
Wages and fringe benefits	9	4	7	9	5	4	8	12	8	14	24	16	9
Hours	9	19	13	19	15	10	12	4	10	10	14	13	12
Physical working conditions	5	3	8	2	4	13	18	14	15	6	2	7	9
Supervision	6	2	9	2	4	7	5	3	6	3	1	0	5
Other extrinsic	12	7	5	10	9	10	8	8	9	8	8	10	9
Nothing	22	23	26	24	23	26	28	32	27	31	14	27	25
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,439	2,264	678	684	5,065	3,118	2,167	540	5,824	643	890	207	12,655
						BLACKS							
Intrinsic	20	20	23	4	19	21	19	23	21	16	30	21	20
Nature of work	10	0	7	0	5	7	6	3	5	8	2	7	6
Other intrinsic	10	20	16	4	14	15	13	20	16	8	27	14	15
Extrinsic	34	53	33	34	40	42	49	36	44	47	44	41	43
Wages and fringe benefits	7	8	15	4	10	17	13	11	14	18	35	22	15
Hours	6	29	1	21	13	6	11	4	8	12	1	9	9
Physical working conditions	0	6	6	0	4	9	12	9	10	3	4	6	8
Supervision	14	2	4	9	7	3	3	1	2	1	0	0	2
Other extrinsic	7	8	7	0	6	7	10	11	10	13	4	4	9
Nothing	45	27	44	62	41	36	32	40	36	36	26	38	36
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	57	54	59	19	190	162	334	242	738	176	60	73	1,240

There is a significant inter-color difference in the proportion of men who dislike most some intrinsic job quality; over three-tenths of white men but only one-fifth of blacks do so. Unlike the case with many other attitudes, it is among blue collar workers that the difference is nearly erased and among white collar workers that it is most pronounced. Yet, the difference in the case of white collar workers is entirely attributable to the large proportion of black men who find nothing to criticize in their jobs. In the white collar group, black men are only half as likely as whites to complain about the essential nature of their occupation and nearly twice as likely as whites to find nothing at all wrong with their jobs.

Industry The greater tendency to complain about extrinsic rather than intrinsic job factors obtains in virtually all industry divisions (Table 7.16). The only exception is finance, insurance and real estate, where white men more frequently express dissatisfaction with intrinsic factors than with extrinsic ones. However, the type of extrinsic factor disliked provides considerable insight into the nature of employment conditions in particular industries. For example, between a fifth and an eighth of white men employed in manufacturing, construction, and mining complain about physical working conditions, while not as many as a tenth in any other industry mention this factor. On the other hand, hours of work are disliked by 25 percent of white men in trade, 15 percent of those in transportation and utilities, and 14 percent of those in agriculture. The proportion mentioning this factor is no more than 10 percent in any other industry, and as low as 5 percent in construction. In agriculture, wages are the factor most often cited as a source of dissatisfaction, accounting for over a fifth of the whites and over a fourth of the blacks in that industry.

Educational attainment The factors that men dislike about their jobs appear to be related to the amount of education they have had. Probably because the more educated man tends to be the more articulate one, the higher a man's educational attainment, the more likely he is to mention something specific that he dislikes about his job (Table 7.17). This holds true for whites and blacks and also for white collar and blue collar workers, although the relationship is not entirely regular. The large inter-color difference in the proportion of men whose greatest dislike is an intrinsic factor is emphasized when we control for educational attainment. That is, the inter-color difference increases consistently with the level of educational attainment.

V.

Interrelations Among Work Attitudes

There is a substantial consistency among various job and work attitudes measured in our study, which increases our confidence in their validity. Specifically, commitment to work is related to work motivation

Table 7.16 Type of Factor Liked Least About Job, by Major Industry Division: Employed Men 45-59 Years of Age, by Color

(Percentage distribution)

Factor liked least	Agriculture	Mining, forestry, and fisheries	Construction	Manufacturing	Transportation and Public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Service	Public administration	Total
	WHITES									
Intrinsic	36	26	34	26	26	30	45	34	37	31
Nature of work	9	10	6	11	9	8	16	11	14	10
Other intrinsic	27	16	27	15	17	22	29	23	23	21
Extrinsic	48	38	41	46	48	47	29	41	41	44
Wages and fringe benefits	22	5	5	8	6	8	7	13	6	9
Hours	14	2	5	10	15	25	11	10	6	12
Physical working conditions	3	20	13	14	10	5	2	7	7	9
Supervision	1	3	3	6	7	3	2	3	12	5
Other extrinsic	8	8	15	9	9	6	7	8	10	9
Nothing	16	36	25	28	26	24	26	25	22	25
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,118	143	1,334	3,815	1,198	1,987	507	1,618	919	12,655
	BLACKS									
Intrinsic	25	27	23	20	26	11	9	19	22	21
Nature of work	5	10	6	7	5	2	0	5	10	6
Other intrinsic	20	16	18	13	21	9	9	14	12	15
Extrinsic	42	36	39	44	37	52	50	48	35	44
Wages and fringe benefits	27	0	12	11	10	20	18	19	11	15
Hours	5	10	2	7	11	18	17	14	2	9
Physical working conditions	5	20	8	12	9	3	7	5	5	8
Supervision	0	0	3	3	0	3	7	2	8	2
Other extrinsic	5	5	16	11	7	7	0	7	9	9
Nothing	33	37	37	35	35	37	42	34	44	36
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	143	14	157	352	131	129	38	184	92	1,240

Table 7.17 Type of Factor Liked Least About Job, by Type of Occupation and Years of School Completed: Employed Men 45-59 Years of Age, by Color

(Percentage distribution)

Factor liked least	White collar					Blue collar					Total (1)				
	8 or less	9-11	12	13 or more	Total	8 or less	9-11	12	13 or more	Total	8 or less	9-11	12	13 or more	Total
								WHITES							
Intrinsic	36	36	38	40	38	22	25	26	34	24	27	30	32	40	31
Extrinsic	39	39	36	41	39	47	47	54	48	48	43	44	46	42	44
Nothing	26	25	26	19	23	31	28	20	18	27	29	26	23	18	25
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	637	827	1,508	2,080	5,065	2,750	1,500	1,271	264	5,824	4,339	2,669	3,123	2,463	12,655
								BLACKS							
Intrinsic	21	6	30	19	19	21	22	18	0	21	20	22	21	19	21
Extrinsic	26	37	33	56	40	42	41	59	92	44	42	40	48	59	44
Nothing	52	57	37	25	41	38	37	24	8	36	38	39	30	22	36
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	42	37	46	62	90	515	142	67	15	738	789	216	147	82	1,240

Total includes service and farm workers not shown separately.

and to job satisfaction in expected ways; degree of satisfaction and factors in job satisfaction and dissatisfaction have the same relationship that other studies have found.

Commitment to Work

A priori, one would expect a positive relationship between the satisfaction a man expresses in his job and his commitment to work. Moreover, men who stress intrinsic rather than extrinsic factors in job satisfaction and those who actually like their jobs for intrinsic rather than extrinsic reasons should be more likely (than their opposite numbers) to be committed to work even if financial necessity were absent. All of these expectations are borne out by the data.

Men who are highly satisfied with their jobs are more likely than all others to say that they would continue working even if they were assured of enough money to live on without working (Table 7.18). This relationship prevails in every type of occupation for both color groups, except among black men serving in blue collar jobs. It is interesting to note that the slightly stronger commitment to work of whites is most evident among the highly satisfied. Men who place a higher value on liking their work than on good wages also are more inclined to want to work even though not in financial need of doing so (Table 7.19). This relation persists in virtually all color-occupation categories, although it is somewhat less pronounced for blacks than for whites. Data not shown here indicate that, similarly and irrespective of color, the man who mentions only intrinsic factors as the things liked best about his present job is the more likely to want to work even if not economically required to do so.

Job Satisfaction

Men who value intrinsic above extrinsic rewards are more likely to be highly satisfied with their current jobs than are those men with the opposite value hierarchies (Table 7.20). The proportion of employed white men who like their job very much is 18 percentage points greater among those who value "liking the work" than among those who value "good wages"; the corresponding difference among black men is 14 percentage points. When type of occupation is controlled, the difference remains substantial for all groups except white farm workers.

It is also true that men who choose an intrinsic factor as the most satisfying aspect of their current job are more likely to be highly satisfied with their jobs than those who specify an extrinsic factor. Table 7.21 shows that when employed white men are asked what they like best about their jobs, intrinsic factors are cited by 72 percent of those who liked their jobs very much but by only 56 percent of all others -- a difference of 16 percentage points. In the case of blacks, the corresponding spread is 10 percentage points. Even when type of occupation is

Table 7.18 Proportion of Men Who Would Work if They Received Enough Money to Live On without Working, by Type of Occupation and Degree of Satisfaction with Job: Employed Men 45-59 Years of Age, by Color

Type of occupation and degree of satisfaction	WHITES		BLACKS	
	Total number (thousands)	Percent who would work	Total number (thousands)	Percent who would work
White collar	5,065	82	190	81
Like it very much	3,447	83	125	88
All other	1,569	79	59	68
Blue collar	5,824	73	738	72
Like it very much	2,879	74	352	69
All other	2,887	71	368	74
Service	643	73	176	66
Like it very much	322	80	97	69
All other	310	66	78	62
Farm	1,097	89	133	82
Like it very much	590	94	46	85
All other	504	83	83	81
Total	12,655	78	1,240	73
Like it very much	7,256	80	619	74
All other	5,278	74	591	73

Table 7.19 Proportion of Men Who Would Work if They Received Enough Money to Live On without Working, by Type of Occupation and Motivation to Work: Men 45-59 Years of Age in the Labor Force, by Color

Type of occupation and motivation to work	WHITES		BLACKS	
	Total number (thousands)	Percent who would work	Total number (thousands)	Percent who would work
White collar	5,092	82	191	81
Good wages	687	73	51	70
Liking the work	4,233	83	130	85
Blue collar	5,939	73	756	72
Good wages	1,356	67	375	70
Liking the work	4,388	74	340	75
Service	657	72	182	66
Good wages	143	63	71	62
Liking the work	468	75	102	70
Farm	1,104	89	135	83
Good wages	194	87	83	83
Liking the work	870	90	45	80
Total	12,826	78	1,269	74
Good wages	2,386	70	582	71
Liking the work	9,986	80	621	77

Table 7.20 Proportion of Men Highly Satisfied with Job, by Motivation to Work and Type of Occupation: Employed Men 45-59 Years of Age, by Color

Type of occupation	Good wages		Liking the work		Total	
	Total number (thousands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much
	WHITES					
White collar	684	58	4,218	71	5,065	69
Blue collar	1,312	36	4,340	54	5,824	50
Service	143	36	461	56	643	51
Farm	194	55	862	55	1,097	54
Total or average	2,340	44	9,900	62	12,655	58
	BLACKS					
White collar	51	58	129	72	190	68
Blue collar	368	46	335	51	738	49
Service	69	49	99	61	176	55
Farm	83	24	44	58	133	36
Total or average	573	44	608	58	1,240	51

Table 7.21 Proportions Liking Intrinsic and Extrinsic Factors Best in Current Job, by Type of Occupation and Degree of Satisfaction with Job: Employed Men 45-59 Years of Age, by Color(1)

Type of occupation and degree of satisfaction	WHITES			BLACKS		
	Total number (thousands)	Intrinsic	Extrinsic	Total number (thousands)	Intrinsic	Extrinsic
White collar	5,065	78	21	190	71	28
Like it very much	3,447	81	19	125	76	24
All other	1,569	70	27	59	62	34
Blue collar	5,824	52	46	738	41	56
Like it very much	2,879	58	42	352	45	54
All other	2,887	46	51	368	36	58
Service	643	59	40	176	46	52
Like it very much	322	66	34	96	53	47
All other	310	51	47	77	36	57
Farm	1,097	81	17	133	68	29
Like it very much	590	84	16	46	66	34
All other	504	78	19	83	67	27
Total	12,655	65	33	1,240	49	48
Like it very much	7,256	72	28	619	54	45
All other	5,278	56	40	591	44	51

(1) Percentages total slightly less than 100 because the table excludes respondents who were unable to mention any factor as the one liked best.

controlled the differences remain substantial, except among black farm workers. These data appear to be consistent with Herzberg's thesis that high job satisfaction is primarily a function of favorable attitudes toward intrinsic job characteristics.[8]

For the entire cohort of men and for each color-occupation group, men who are highly satisfied with their jobs are much less likely than others to be able to cite any unsatisfactory job aspect (Table 7.22). This is true of nearly one-half of the black men and one-third of the whites who like their jobs very much. Thus, while white men are more inclined than blacks to say that they are highly satisfied with their jobs, when black men do say that they like their jobs very much, they seem to have fewer reservations than their white counterparts.

VI.

Summary and Conclusions

The commitment to work among men 45-59 years of age is remarkably strong. Three-fourths of the black men and nearly four-fifths of the white men is this age cohort say that they would work even if they had "enough money to live on without working." The work commitment is strongest among high-level white collar workers and farmers, and varies inversely with age; a finding parallel to the Morse and Weiss study.[9] Other correlates of a strong work commitment are youth, good health, a high degree of job satisfaction, and a value hierarchy assigning a high rank to intrinsic job aspects.

More men seem to be motivated to work by the nature of the work than by the extrinsic rewards, i.e., a majority of the men in our survey selected "liking the work" rather than "good wages" as the more important thing about a job. There is substantial inter-color difference in motivation to work, since four-fifths of the whites but only one-half of the blacks chose "liking the work." However, the extent of the difference between black men and white men depends very much on their occupational and educational levels. Among the best educated white collar groups, the difference is much smaller than among the poorly educated and/or blue collar workers.

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[8] See footnote 6 above.

[9] Nancy C. Morse and R.S. Weiss, "The Function and Meaning of Work and the Job," American Sociological Review, Vol. 20 (April, 1955), pp. 191-98.

Table 7.22 Type of Factor Liked Least About Job, by Type of Occupation and Degree of Satisfaction with Job: Employed Men 45-59 Years of Age, by Color

(Percentage distribution)

Factor liked least	White collar			Blue collar			Service			Farm			Total		
	Like it very much	All other	Total	Like it very much	All other	Total	Like it very much	All other	Total	Like it very much	All other	Total	Like it very much	All other	Total
	WHITES														
Intrinsic	34	47	38	21	28	24	19	38	28	35	36	36	28	35	31
Extrinsic	36	45	39	40	58	48	40	43	41	41	55	47	38	52	44
Nothing	30	9	23	40	15	27	41	18	31	24	8	16	34	13	25
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	3,447	1,569	5,065	2,879	2,887	5,824	322	310	643	590	504	1,097	7,256	5,278	12,655
	BLACKS														
Intrinsic	14	31	19	17	25	21	9	25	16	22	26	25	16	26	20
Extrinsic	33	51	40	34	52	44	38	58	47	40	43	42	35	52	44
Nothing	52	19	41	48	23	36	53	17	36	37	30	33	49	23	36
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	125	59	190	352	368	738	96	77	176	47	83	133	619	591	124

The vast majority of men 45-59 years of age have favorable attitudes toward their jobs; only 7 percent express some dissatisfaction. About two-thirds of the men are highly satisfied with their jobs, and degree of satisfaction is positively related to occupational level, age, rate of pay, and health status. The somewhat smaller proportion of highly satisfied black men is largely attributable to their lower occupational assignments. Similar to the findings of other studies, our data indicate a U-shaped relationship between degree of job satisfaction and length of service. As might be expected, high job satisfaction is more common among men who place a higher value on liking their work than on good wages.

Among employed white men in this age cohort, two-thirds indicate an intrinsic factor as the best-liked job quality. Although the corresponding proportion among employed blacks is only one-half, the inter-color difference is largely eliminated by controlling for occupation. That is so because white collar workers overwhelmingly favor some intrinsic job quality while operatives and nonfarm laborers are the most extrinsically oriented. The occupational differences in attitudes toward job are also reflected in the data when industry is used as a control. Consistent with the influence of occupation is our finding that educational attainment is positively associated with liking intrinsic job factors. As would be anticipated, men who are highly satisfied with their jobs are even more likely than others to prefer some intrinsic job factor.

In contrast, the job qualities most frequently disliked are extrinsic ones; about 44 percent of each color group mentioned an extrinsic element as the one liked least. Yet, far more whites than blacks cited an intrinsic element as least-liked (31 percent versus 20 percent). While all but 2 or 3 percent of the men mentioned a best-liked factor, a fourth of the whites and one-third of the blacks were unable to specify a job factor they liked least. Dislike of extrinsic factors is strongest among blue collar workers. There are some clear inter-industry differences in the specific extrinsic factors disliked. As might be expected, physical working conditions are most disliked in the goods-producing industries, hours of work are the major complaint in trade and transportation, and wages are liked least in agriculture. Probably because the more educated man tends to be the more articulate one, the higher a man's educational attainment, the more likely he is to mention some specific job factor that he dislikes. As one would anticipate, highly satisfied men are much less able than others to find any job factor that they dislike.

While the sizeable porportion of men expressing high job satisfaction is impressive, we are aware that most men cannot psychologically afford to admit to themselves or to others that they dislike their most public and time-consuming roles--their jobs. That prefatory caution notwithstanding, one of the clearest findings in this chapter is that men in white collar jobs are substantially better satisfied with their work than are men in other occupation groups. As a result of technological progress and assuming some stability of that occupational difference, the continued increase in white collar employment at the expense of blue collar work points to an even more satisfied future work force.

It is hoped that the longitudinal aspects of our study will shed additional light on the stability of some of these work attitudes, both for men whose labor market and employment status change and for men who remain in the same job. Furthermore, we hope that it will indicate the existence and direction of a causal relationship between work attitudes and labor market behavior.

Chapter 8*

CONCLUSIONS

Many facets of the labor market status and experience of men between the ages of 45 and 59 have been analyzed in the previous chapters of this volume. We have examined the extent of their current participation in the labor market, their susceptibility to unemployment, their distribution among occupations and industries, the duration of their service in current jobs, and their rates of pay. In addition to describing the pattern of occupational and geographic change during their working lives to date, we have inquired into their attitudes toward working in general and to their jobs in particular, and have explored their reactions to certain types of job changes, including complete withdrawal from the labor market. Variations in all these aspects of behavior and attitudes have been sought in terms of a large number of demographic, economic, and attitudinal characteristics, and numerous relationships that have been uncovered appear to have explanatory and predictive value.

In this final chapter, we make no attempt at a detailed summary of our findings, since the reader interested in such a summary can consult the concluding section of each chapter. Rather, our purpose is to stand back from the data, as it were, and to emphasize those aspects of the study that seem to us to contribute most to an understanding of the labor market behavior of the men under consideration and to the development of guidelines for effective manpower policy.

Were the labor market situation of all other segments of the population at least as favorable as that of this group of men, the manpower problems of society would be considerably less serious than they are. Their labor force participation is very high: nineteen out of twenty were in the labor force at the time of the survey and over 16 out of 20 were continuously in for 52 weeks in 1965. Unemployment is quite low: less than 1.5 percent in the survey week. Those who are employed are, by and large, in better jobs than the average of all males. A large majority of them are in different occupations from those in which they started their work careers, and a majority of these occupational changes appear to have been for the better. In any case, two-thirds regard their current occupational assignment to be the best of their career. The employment relationship appears to be quite stable for a large majority of the men: three-fifths have served their present employer (or have been self employed) for ten years or more; two-fifths profess an unwillingness to consider another job at any conceivable wage rate; and more than nine out of ten claim that they like their jobs.

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*This chapter was written by Herbert S. Parnes.

On the other hand, there are very real problems among this group of males. For one things, a large majority of those out of the labor force appear to be there not by choice; most of them left their last jobs for health reasons, and most report that their health or physical condition currently prevents their working. Second, the low rates of unemployment that exist in any given week grossly understate the amount of unemployment experienced during a year; moreover, unemployment is by no means evenly distributed throughout the total age cohort. An eighth of the men experienced at least a week of unemployment at some time during 1965, as contrasted with the less than one-in-fifty who were unemployed at the time of the survey. Also, unemployment tends to be visited upon the same men repeatedly.

A by no means negligible proportion of these men are in jobs at the very bottom of the occupational hierarchy, either because they started and remained there or because they slipped down during their working lives. One in twelve is an unskilled laborer; one in ten earns less than $1.50 an hour; almost one in six is in an occupation of lower socioeconomic status than that of his first job. In addition, not all of the men have the stable work attachments described above. About a fifth claim that they would not work except for financial necessity; a tenth have served less than a year with their current employer; and although only two out of a hundred admit to an intense dislike of their current job, as many as one in eight would accept another at the same or lower wage rate.

Sources of Variation in Labor Market Behavior

The categorizations of the preceding three paragraphs are very gross, indeed. They nevertheless serve to indicate the substantial variation that exists in almost every indicator of "success" in the labor market even among a group that is relatively homogeneous by age. A substantial part of the analysis in this study has represented a search for the sources of this variation, and the factors that appear to be important may now be reviewed briefly.

Color Within the ages covered by this study, there is scarcely a dimension of labor market behavior with respect to which black men and white men do not differ. Black men have lower labor force participation rates and higher unemployment rates than white men. They started their careers in jobs of lower socioeconomic status than those of white men, but nevertheless experienced less upward mobility between first and current jobs. They are consequently concentrated in the less desirable jobs and received substantially lower wage rates than whites. Not surprisingly, therefore, their attitudes toward work in general and their jobs in particular are also different from those of whites. Overall, they are less likely than whites to be interested in paid employment in the absence of financial necessity, they are more likely than whites to value good wages above the intrinsic qualities of the job, and are also more likely than whites to evidence interest in taking another job at a higher wage rate.

One of the questions at which our analysis has been directed is whether these differences between blacks and whites simply reflect differences in educational attainment, occupational affiliation, and similar factors, or whether they remain even when such factors are controlled. The large number of interrelated variables prevents a confident answer to this question at the present time, yet it is impossible not to be impressed with the number of inter-color differences that either disappear or are substantially reduced when occupation is controlled. This is true, for example, of labor force participation, unemployment, tenure in current job, and a number of attitudinal questions. To illustrate, within major types of occupations (e.g., white collar and blue collar) there is virtually no difference between whites and blacks in our measure of commitment to work, degree of satisfaction with current job, or degree of attachment to current employer. On the other hand, the lower propensity of black men to retire relative to whites tends to persist even when occupation and other relevant factors are controlled. Similarly, the greater tendency of blacks to place a higher value on good wages than on satisfaction with type of work tends to persist even within occupation groups.

One of the differences in labor market status between white men and black men that remains pronounced despite controls for education and occupation is in their wage rates. In every major occupation group, white men have higher wage rates than black men whether one controls for length of service, state of health, or number of years of school completed. Among the logically conceivable explanations for this result are the following possibilities: (1) that the education of blacks is qualitatively inferior to that of whites, (2) that cultural differences between whites and blacks have an independent effect on job performance, and (3) that black men are discriminated against in the labor market either by being hired for the lower paying jobs within major occupation groups or by being paid lower wages for essentially the same jobs. In a sense, all three of these possible explanations involve discrimination, albeit with different time perspectives, since qualitatively inferior education for blacks would imply discrimination in educational opportunities, while whatever cultural differences may exist independently of differences in educational backgrounds must surely reflect the historic differentials in status between blacks and whites in this country, originating with the institution of slavery. In any case, the present study provides no basis for assessing the validity or relative importance of each of these three possible explanations. What is known about the variation in the quality of education in the United States makes the first of them certainly relevant. The attitudinal differences between blacks and whites that have been found to persist even when occupation and education are controlled caution us against ruling out the second. What is known about racial attitudes and practices in the United States makes the validity of the third unquestionable.

Age and marital status Two other demographic factors that "make a difference" with respect to labor market behavior are age and marital status. Within the relatively narrow age limits covered by the present study, age does not correlate as strongly with various aspects of behavior as it would for the entire labor force. Nevertheless, the extent of participation in labor market activity--whether measured by current labor force participation rate, number of weeks in a year in the labor force, or number of hours worked per week--tends to decline with advancing age even within these narrow limits. Moreover, among those in the labor force, commitment to the work role declines in strength as age increases. It seems clear that at least some, if not all, of the age differences that have been found among this group of males are reflections of the fact that the older men are less likely to enjoy good health and to have as much education as the younger ones.

Men who are married have more extensive labor market participation than those who are widowed, divorced, separated, or "never married." They also suffer less unemployment than men in these other marital-status categories and have somewhat different mobility characteristics. Part of the difference may reflect the greater financial responsibilities of married men that create greater pressures for continuous employment; but in part it doubtless also reflects the fact that married men report fewer problems of health and physical condition than the other groups. In addition, it may be that men who have low propensities to work or who are highly susceptible to unemployment are less likely than other men to take wives (or to keep them).

Health, education, and training Despite the fact that our questions about health were limited and involved self-assessment only, this variable shows up as an extremely powerful one in explaining variations in both labor market behavior and work attitudes. The presence of health problems is related to low labor force participation, high unemployment, low commitment to work, high propensity to retire, low rates of pay (even within major occupation groups), and relatively more dissatisfaction with current job.

We cannot be entirely sure in all of these cases what the direction of causation is. In some, it can clearly operate either way; e.g., low rates of pay may reflect lower productivity associated with poor health or may make it more difficult for an individual to "purchase" good health. Similarly, the association between good health and high job satisfaction may mean that good health promotes a positive attitude toward the job; but it may also mean that dissatisfaction with the job is part of a general spiritual malaise that produces dissatisfaction with one's health as well. Our longitudinal analysis will permit us to examine changes in these variables over time and should thus enable us to be more confident than we can be now of the direction of these relationships. In the meantime, there are at least some cases in which it seems safe to conclude that health is the explanatory factor, e.g., its association with labor force participation. The findings, then, emphasize the importance of social investments in health, since they are desirable not only in their own right but because they contribute to a fuller and more effective utilization of the nation's resources.

The extremely powerful influence of another type of "investment in man" is also indicated by our findings. There is scarcely a variable that we have examined that is not profoundly associated with broad occupational category, with number of years of school completed, or with both of these. More education generally means higher degrees of labor market participation, lower unemployment, higher wage rates (within major occupation groups), as well as higher commitment to the work role. Vocational training outside the formal educational system that men in this age category have received during their entire careers, although correlated with their level of formal education, does not show as pronounced relationships with these variables as does education. Nevertheless, there is evidence that even for these men such training may have provided a "payoff" in the form of lower unemployment and higher wage rates.

These relationships, while almost certainly valid to some extent, must nevertheless be interpreted with some sophistication. They do not mean, of course, that individuals can be assured of avoiding labor market difficulties if only they acquire the appropriate education and training. This is because to some extent such characteristics as initiative, native ability, and perseverance, which themselves help to account for educational attainment, are responsible for success in the labor market. To take the extreme case, it would be fatuous to prescribe education as a solution to the labor market difficulties of the uneducable! Nevertheless, this is not to gainsay the contribution that education doubtless makes to labor market accommodation.

Attitudinal variables The role of values and attitudes in conditioning labor market behavior largely remains to be explored in the follow-up surveys of our sample of men. Nevertheless, the analysis of the data from the first survey provides grounds for believing that a number of the attitudes that have been measured will help to explain and predict behavior. One basis for this belief is the high degree of consistency among attitudes. Another is the relationships that have been found between the attitudes and other characteristics that are known to be related to behavior. For example, our measure of attachment to current employer is associated with length of service, which is known to condition the likelihood of a voluntary quit. Despite this association, however, there is variation in our measure of attachment _within_ each length of service category. The real test will lie in seeing whether, among all those with a given tenure, the attitudinal measure discriminates between those who change jobs and those who stay.

To cite another example, it is encouraging that the measure of commitment to work is associated with health, since the latter is known to affect labor force participation. However, not all men with health problems have a low work commitment, nor do all healthy men have a strong commitment. Our test will be to ascertain whether _within_ each health category, those with low commitment are more likely than the others to leave the labor force. The uncovering of such attitudinal determinants of labor market behavior will add a significant dimension to our understanding of the operation of labor markets and will perhaps permit policy measures for dealing with labor market problems to be more sharply focused.

In the meantime, some of the descriptive findings thus far appear to have implications for effective manpower policy. Some of the literature on manpower economics emphasizes the point that most employed workers are satisfied with their jobs, and that most of those who are satisfied are not really "in the labor market" in the sense of being interested in and receptive to alternative employment opportunities.[1] The literature specifically stresses the immobility of men in the age category under consideration -- particularly those with long service. While these generalizations are almost certainly warranted, as descriptions of central tendencies, it is nevertheless instructive that although only about 7 percent of employed men 45 to 59 years of age express dissatisfaction with their jobs, 12 percent appear to be so eager to change that they would do so with no increase in wages, and an additional 4 percent would change jobs for a very moderate (less than 10 percent) improvement in wages. These data suggest that the immobilities of this group of men are attributable not only to reluctance to change jobs, but in some significant degree to the absence of opportunities or to a lack of awareness of them. Thus, policies directed at the elimination of age discrimination in hiring and at bringing job opportunities to the attention of employed workers promise the benefit of a more flexible labor force at the same time that they enhance the probabilities of self realization of the individuals involved. Such policies will not, of course, make most of the men in this age category highly mobile; but they may convert the potential mobility of a minority of the group into an actuality.

A Forward Look

As follow-up surveys of this group of men are analyzed, attention will focus on a number of different types of questions. Without attempting to be exhaustive, it is appropriate to conclude this volume with a brief preview of the kinds of analysis we propose to make and the major types of hypotheses that we intend to test.

Collection of detailed work histories over a five-year period will permit the testing of some of the relationships that have been uncovered in this report over a longer period of time. One advantage in doing so is that we would expect greater variations in such variables as unemployment and withdrawal from the labor force over the longer time period. This will increase the statistical reliability of the analysis, since we will be describing much larger numbers of men who, for example, experienced some unemployment over the five-year period.

Second , in each year, we shall be interested in both describing and analyzing the changes that occur in labor force and employment status and in job status. Merely describing the patterns of change will be of interest in itself, since although we have reasonably good estimates of, say, the annual number of job changers, there is only limited evidence on the proportion of those who are repeaters from year to year. In addition, however, both the "causes" and "consequences" of these changes in status will be explored. For example, in what respects do those who leave the labor force during the course of the year differ from those who do not? Are men whose financial responsibilities have decreased (by virtue, for example, of graduation of children from college) more likely than others to reduce the intensity of their labor market participation? To what extent are changes in health or physical condition reflected in movement into or out of the labor force, or from one occupational assignment to another? Are men in this age group whose marriages terminate more likely than others to make a job change? -- an hypothesis suggested by the data of the initial survey. Are changes in the degree of labor force participation by the man accompanied by changes in the degree of participation by other family members? Are men who have expressed dissatisfaction with their jobs in the initial survey more likely to have left them than those who were satisfied? Are job changers more likely or less likely than nonchangers to feel an increased satisfaction in their work? Are they more or less likely to be earning more money? These are only illustrative of the rich mine of data to be exploited. Our plan of analysis calls for ascertaining the correlates of most of the dimensions of labor mobility: movement into and out of the labor force, from unemployment to employment and vice versa, between occupations (with or without an accompanying change of employer), between employers (with or without an accompanying change of occupations), and between different labor market areas.

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[1] See, for example, Lloyd Reynolds, The Structure of Labor Markets (New York: Harper and Brothers, 1951), p. 210.

A third area of interest, closely related to the second, involves a test of the predictive value of some of our attitudinal measures. For example, to what extent does our measure of "attachment" to an employer discriminate -- within occupational and length of service categories -- between those who do change jobs during the period of the study and those who do not? Would the predictive efficiency of the measure be improved if it were combined in an index with other measures, e.g., degree of satisfaction with job or whether the individual places a higher value on good wages or appealing job content? Does the propensity-to-retire index discriminate -- within groups of men with the same occupational affiliation and health status -- between those who leave the labor force during the four years covered by the study and those who do not? Answers to these questions have significance not only from the standpoint of interpreting labor market behavior, but also from a methodological point of view, for they permit an assessment of the validity of responses to hypothetical questions.

Fourth, we shall be interested in the development of certain attitudes over time -- particularly those relating to retirement. As men in this age group grow older, what changes occur in their expectations concerning age of retirement and post-retirement activity? Will those who are now 45 to 49 years old have attitudes at the end of the five-year period comparable to those now held by the 50 to 54 year old group? How do specific patterns of labor market experience during the five-year period interact with initial attitudes to affect attitude at the end of the period? What is the relation between changes in work attitudes and propensity to retire?

Finally, exploration of certain changes in the environment over time is another area of interest. What can be done in this connection will obviously depend on how much variation occurs in the "environment" over the five-year period. Should there be fluctuations in the level of economic activity, the effects of these on volume and pattern of mobility and upon degree of job attachment, for example, may be explored. Should there be innovations in manpower policy, it may be possible to test the effects of these upon the age group of men under consideration. For example, one might inquire whether changes in the coverage provisions or the minimum wage under the Fair Labor Standards Act have any perceptible effect on the labor market experience of those occupational and industrial categories of men whose wages are most likely to have been affected thereby. Finally, in view of the rather dramatic changes in the climate of race relations that is taking place in the United States, it will be interesting to see whether any reflection of this can be found in the status and/or attitudes of the black men in our sample.

At the conclusion of the five years of study, there will have been assembled for this age group of men a larger mass of data on work experience and work attitudes than has ever been accumulated for any national sample of individuals. At the same time, similar work is going forward on longitudinal studies of these other population segments: women between the ages of 30 and 44, young men 14 to 24 years of age, and young women of the same ages. The opportunities for analysis within each of these studies, to say nothing of the comparisons among them, are almost limitless. Hopefully, the payoff will be new insights into labor market processes and problems that will not only improve our theory of labor markets, but, what is even more important, provide a basis for both private and public manpower policies that will lead to improvements in the quality of life as well as to improved utilization of the nation's human resources.

APPENDICES

Appendix A

GLOSSARY

AGE

Age of respondent as of last birthday prior to April 1, 1966.

ATTACHMENT TO CURRENT JOB

Relative increase in rate of pay for which an employed respondent would be willing to accept an hypothetical offer of employment with a different employer.

CLASS OF WORKER

Wage and Salary Worker

A person working for a rate of pay per unit-time, commission, tips, payment in kind, or piece rates for a private employer or any government unit.

Self-employed Worker

A person working in his own unincorporated business, profession, or trade, or operating a farm for profit or fees.

Unpaid Family Worker

A person working without pay on a farm or in a business operated by a member of the household to whom he is related by blood or marriage.

COLOR

The term "black" refers to all those who are not Caucasion and is used in lieu of the more conventional "nonwhite." For further detail see Chapter 1, footnote 2.

COMMITMENT TO WORK

Respondent's reaction to the question of whether he would work even "if he received enough money to live comfortably without working."

CUMULATIVE LENGTH OF SERVICE IN BEST OCCUPATION

Total number of years (not necessarily consecutive) spent by respondent in that kind of work which he designates as most-preferred-since-leaving-school.

EDUCATIONAL ATTAINMENT: see YEARS OF SCHOOL COMPLETED

EMPLOYED: see LABOR FORCE AND EMPLOYMENT STATUS

EXTRINSIC JOB FACTORS

Aspects of the job environment such as wages, hours, security, and supervision, which have no direct relation to the inherent nature of the work.

FAMILY INCOME, EXCLUDING RESPONDENT'S EARNINGS

Income from all sources (including wages and salaries, net income from business or farm, pensions, dividends, interest, rent, royalties, social insurance, and public assistance) received by any family member living in the household, minus the earnings of the respondent. Income of nonrelatives living in the household is not included.

FAMILY NET ASSETS

The market value of all family assets--real and financial--minus the value of debts outstanding.

HEALTH, EFFECT ON WORK

Respondent's assessment of whether his physical or mental condition (1) limits the kind and/or amount of work that he can do or (2) prevents him from working entirely. For discussion of the objectivity of the measure see Chapter 3, footnote 12.

HEALTH, SELF-RATING OF

Respondent's assessment of his health as compared with that of other men his age: "excellent, good, fair, or poor."

HEALTH PROBLEM, DURATION OF

The length of time--in years--that the respondent has suffered from some malady which limits the kind and/or amount of work that he can perform or entirely prevents him from working.

HOURLY RATE OF PAY

Compensation--in dollars--for work performed. This is limited to wage and salary workers because it is virtually impossible to ascertain to what extent the earnings of the self employed are wages as opposed to other kinds of returns. If a time unit other than an hour was reported, hourly rates were computed by first converting the reported figure into a weekly rate and then dividing by the number of hours usually worked per week.

HOURS WORKED DURING SURVEY WEEK

The total number of hours worked at all jobs held by the respondent during the calendar week preceding the date of interview.

INDUSTRY

The 10 one-digit-level classes of the Bureau of the Census' functional classification of employers on the basis of nature of final product.

INTRINSIC JOB FACTORS

Aspects of the job which are inherent in the nature of the occupation or relate to job content.

JOB

A continuous period of service with a given employer.

Current or Last Job

For those respondents who were employed during the survey week: the job held during the survey week. For those respondents who were either unemployed or out of the labor force: the most recent job.

First Job

The respondent's initial job of at least one month's duration after permanently leaving school.

Longest Job

The job at which the respondent had (has) spent the largest proportion of his entire work career.

LABOR FORCE AND EMPLOYMENT STATUS

In the Labor Force

All respondents who were either employed or unemployed during the survey week:

Employed

All respondents who during the survey week were either (1) "at work"--those who did any work for pay or profit or worked without pay for 15 hours or more on a family farm or business; or (2) "with a job but not at work"--those who did not work and were not looking for work, but had a job or business from which they were temporarily absent because of vacation, illness, industrial dispute, bad weather, or because they were taking time off for various other reasons.

Unemployed

All respondents who did not work at all during the survey week and had either looked or were looking for a job in the four-week period prior to the survey, all respondents who did not work at all during the survey week and were waiting to be recalled to a job from which they were laid-off, and all respondents who did not work at all during the survey week and were waiting to report to a new job within 30 days.

Out of the Labor Force

All respondents who were neither employed nor unemployed during the survey week.

LABOR FORCE EXPOSURE, POTENTIAL

The period of time between the date that the respondent left school and the survey week.

LABOR FORCE PARTICIPATION RATE

The proportion of the total population or of a demographic subgroup of the population classified as "in the labor force."

LENGTH OF SERVICE IN CURRENT (LAST) JOB

The total number of years spent by the respondent in his current (most recent) job.

MARITAL STATUS

Respondents were classified into the following categories: married, divorced, widowed, separated, and never married. "Married" includes all respondents who answered that they are married to the marital status question. (Therefore, this group includes both those who are classified as "married, spouse present" and "married, spouse absent" according to the parlance of the Bureau of the Census.) "Separated" includes all respondents who answered that they are separated to the marital status question.

MOTIVATION TO WORK

Respondent's answer to "what would you say is the more important thing about any job--good wages or liking the kind of work you are doing."

NATIONALITY

Respondents are classified on the basis of "national origin" as follows: if all were born in the United States, the respondent is classified as "American." Otherwise, respondent is assigned the nationality of the first of the following born outside of the U.S.: (1) respondent, (2) father, (3) mother, (4) paternal grandfather, (5) paternal grandmother, (6) maternal grandfather, and (7) maternal grandmother.

NUMBER OF DEPENDENTS (EXCLUDING WIFE)

The number of people who receive at least one-half of their support from the respondent, including children, parents, and other relatives, whether or not they reside in the household.

OCCUPATION

The ten occupation *groups* are the ten one-digit classes used by the Bureau of the Census in the 1960 Census. The four *types* of occupation are *white collar* (professional and technical workers; managers, officials, and proprietors; clerical workers; and sales workers), *blue collar* (craftsmen and foremen, operatives, and nonfarm laborers), *service*, and *farm* (farmers, farm managers, and farm laborers).

OUT OF THE LABOR FORCE: see LABOR FORCE AND EMPLOYMENT STATUS

POTENTIAL LABOR FORCE MEMBERS

Those respondents out of the labor force who responded affirmatively, with or without qualification, to a hypothetical job offer.

PROPENSITY TO RETIRE

This is measured by the score on an attitudinal index whose construction is detailed in Chapter 6, footnote 11.

PSU (PRIMARY SAMPLING UNIT)
One of the 235 areas of the country from which the sample for this study was drawn; usually an SMSA (standard metropolitan statistical area) or a county.

REACTION TO HYPOTHETICAL JOB OFFER: see ATTACHMENT TO CURRENT JOB and POTENTIAL LABOR FORCE MEMBERS

RESIDENCE IN COUNTY OR SMSA, LENGTH OF
The length of time--in years--the respondent has lived in county or SMSA of present residence.

SATISFACTION, DEGREE OF JOB
Respondent's report of his feelings toward his job when confronted with the following four alternatives: "like it very much, like it fairly well, dislike it somewhat, dislike it very much."

SELF EMPLOYED: see LABOR FORCE AND EMPLOYMENT STATUS

SPELL OF UNEMPLOYMENT
A continuous period of at least one week's duration during which the respondent was unemployed. A spell may be terminated either by employment or by withdrawal from the labor force.

SURVEY WEEK
For convenience, the term "survey week" is used to denote the calendar week preceding the date of interview. In the conventional parlance of the Bureau of the Census, it means the "reference week ."

TENURE: see LENGTH OF SERVICE IN CURRENT (LAST) JOB

UNEMPLOYED: see LABOR FORCE AND EMPLOYMENT STATUS

UNEMPLOYMENT EXPERIENCE IN 1965
Cumulative number of weeks in 1965 that the respondent reported he was looking for work or on lay-off from a job.

UNEMPLOYMENT RATE
The proportion of the labor force classified as unemployed.

UNPAID FAMILY WORKER: see CLASS OF WORKER

VOCATIONAL TRAINING OUTSIDE OF SCHOOL
Program(s) taken outside of the regular school system for other than social or recreational purposes. Sponsoring agents include government, unions, and business enterprises. A training course sponsored by a company must last at least six weeks to be considered a "program ."

WAGE AND SALARY WORKER: see CLASS OF WORKER

WAGE RATE: see HOURLY RATE OF PAY

WEEKS IN THE LABOR FORCE IN 1965

Cumulative number of weeks in 1965 that the respondent reported that he either worked, looked for work, or was on lay-off from a job.

WEEKS UNEMPLOYED IN 1965: see UNEMPLOYMENT EXPERIENCE IN 1965

WEEKS OUT OF THE LABOR FORCE IN 1965

The difference between 52 and "weeks in the labor force in 1965 ."

WHETHER WOULD WORK IF RECEIVED ENOUGH MONEY TO LIVE ON: see COMMITMENT TO WORK

WORK EXPERIENCE

Any full- or part-time employment experienced by the respondent any time during his life.

YEARS OF SCHOOL COMPLETED

The highest grade finished by the respondent in "regular" school, where years of college completed are denoted 13, 14, 15, etc. "Regular" schools include graded public, private, and parochial elementary and high schools; colleges; universities; and professional schools.

Appendix B*

SAMPLING, INTERVIEWING, AND ESTIMATING PROCEDURES

The Survey of Work Experience of Men 45-59 Years of Age is one of four longitudinal surveys sponsored by the Manpower Administration of the U. S. Department of Labor. Taken together these surveys constitute the National Longitudinal Surveys.

The Sample Design

The National Longitudinal Surveys are based on a multi-stage probability sample located in 235 sample areas comprising 485 counties and independent cities representing every state and the District of Columbia. The 235 sample areas were selected by grouping all of the nation's counties and independent cities into about 1,900 primary sampling units (PSU's) and further forming 235 strata of one or more PSU's that are relatively homogeneous according to socioeconomic characteristics. Within each of the strata a single PSU was selected to represent the stratum. Within each PSU a probability sample of housing units was selected to represent the civilian noninstitutional population.

Since one of the survey requirements was to provide separate reliable statistics for nonwhites, households in predominantly nonwhite enumeration districts (ED's) were selected at a rate three times that for households in predominantly white ED's. The sample was designed to provide approximately 5,000 interviews for each of the four surveys--about 1,500 nonwhites and 3,500 whites. When this requirement was examined in light of the expected number of persons in each age-sex-color group it was found that approximately 42,000 households would be required in order to find the requisite number of nonwhites in each age-sex group.

An initial sample of about 42,000 housing units was selected and a screening interview took place in March,and April,1966. Of this number about 7,500 units were found to be vacant, occupied by persons whose usual residence was elsewhere, changed from residential use, or demolished. On the other hand, about 900 additional units were found which had been created within existing living space or had been changed from what was previously nonresidential space. Thus 35,360 housing units were available for interview; of these, usable information was collected for 34,662 households, a completion rate of 98.0 percent.

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* This appendix was written by George E. Hall, Assistant Chief, Demographic Surveys Division, U. S. Bureau of the Census.

Following the initial interview and screening operation, 5,518 males age 45-59 were designated to be interviewed for the Survey of Work Experience. These were sampled differentially within four strata: whites in white ED's (i.e., ED's which contained predominantly white households), nonwhites in white ED's, whites in nonwhite ED's, and nonwhites in nonwhite ED's.

The Field Work

Three hundred seventeen interviewers were assigned to this survey. The primary requirement for interviewers was previous experience with the Current Population Survey (CPS). A number of sections of the questionaire dealt with labor force or socioeconomic concepts which were either similar to or identical with the CPS, thus a significant increase in quality and reduction of training costs was achieved.

A two-stage training program was used to provide specific instruction for this survey. First, two supervisors from each of the Bureau's 12 regional offices were trained in Washington; they in turn trained the interviewers and office clerks assigned to the survey in their regions. Each trainee was provided with a "verbatim" training guide prepared by the Bureau staff and reviewed by the Manpower Administration and the Center for Human Resource Research of The Ohio State University. The guide included not only lecture material, but a number of structured practice interviews to thoroughly familiarize the interviewers with the questionnaire. In addition to the classroom training, each interviewer was required to complete at least one live interview prior to beginning her assignment. A total of 23 training sessions were held in some 19 cities throughout the country. Each of the regional supervisors was observed during at least one training session by professional members of the participating organizations.

Each interviewer was observed during the early part of her assignment. This observation served the dual function of familiarizing the professional staff of the Census Bureau and of the Center for Human Resource Research with the actual field situation and of providing an opportunity for on-the-job training of the interviewer.

In addition to training, a field edit was instituted to insure adequate quality. This consisted of a "full edit" of the first five questionnaires returned by each interviewer, and a partial edit of the remaining questionnaires from each interviewer's assignment. The full edit consisted of reviewing the questionnaires from beginning to end, to determine if the entries were complete and consistent and whether the skip instructions were being followed. This edit was designed to determine if the interviewer understood her job. The interviewer was contacted by phone concerning minor problems, and depending on the nature of the problem was either merely told of her error or asked to contact the respondent for further information or for clarification. For more serious problems the interviewer was retrained either totally or in part, and the questionnaire was returned for completion.

If problems arose, the complete edit was continued until the supervisor was satisfied that the interviewer was doing a complete and consistent job. The partial edit simply checked to determine that the interviewer had not inadvertently skipped any part of the questionnaire which should have been filled. Any questionnaire which failed the partial edit was returned to the interviewer for completion.

The training of interviewers began on May 25, 1966, and the interviewing immediately after. The interviewing continued until mid-July, 1966. This is longer than the period permitted for the usual Census survey. However, a number of factors were responsible for the elapsed time. First, the questionnaire required approximately 45 minutes to an hour to complete. This interview time, coupled with the limited periods during the day when men in this age group are available, resulted in an average completion rate of just under two per day, during even the early stages of the interviewing. This average rate was reduced later as the more accessible cases were completed. The requirement that the interviewers be experienced in the CPS also caused some delay. For about one week each month the interviewers were not able to work on this survey because of the conflicting demands of the CPS. Finally, extra time was allowed to reduce the number of noninterviews resulting from persons who were temporarily absent from their homes or were otherwise temporarily not available for interview.

Of the 5,518 males 45 to 59 selected for the sample, usable questionnaires were obtained from 5,030 cases for a completion rate of 91.2 percent. The 488 noninterview cases are distributed as follows:

Reasons for Noninterviews in
Survey of Work Experience of Males 45-59

Totals	Total	Refused	No one home -- repeated visits	Moved or left house--could not locate	Temporarily absent	Other
Number of noninterviews	488	146	140	69	68	65
Percent of work-load	8.8	2.6	2.5	1.3	1.3	1.1
Percent of all noninterviews	100.0	30.0	28.7	14.0	14.0	13.3

Estimating Methods

The estimation procedure adopted for this survey was a multi-stage ratio estimate. The first step was the assignment to each sample case of a basic weight which was equal to the reciprocal of the sampling fraction of the stratum from which it was selected. Thus, for the Survey of Work Experience of Males 45-59 there were four different base weights reflecting differential sampling by color within stratum (i.e., white ED's versus nonwhite ED's).

1. Noninterview Adjustment

The weights for all interviewed persons were adjusted to the extent needed to account for persons for which no information was obtained because of absence, refusal, or unavailability for other reasons. This adjustment was made separately for each of eight groupings: Census region of residence (Northeast, North Central, South, West) and place of residence (urban, rural).

2. Ratio Estimates

The distribution of the population selected for the sample may differ somewhat, by chance, from that of the nation as a whole, in such characteristics as age, color, sex, and residence. Since these population characteristics are closely correlated with the principal measurements made from the sample, the latter estimates can be substantially improved when weighted appropriately by the known distribution of these population characteristics. This was accomplished through two stages of ratio estimation, as follows:

a. First-Stage Ratio Estimation

This is a procedure in which the sample proportions were weighted by the known 1960 Census data on the color-residence distribution of the population. This step took into account the differences existing at the time of the 1960 Census between the color-residence distribution for the nation and for the sample areas.

b. Second-Stage Ratio Estimation

In this step, the sample proportions were weighted by independent current estimates of the population by age and color. These estimates were prepared by carrying forward the most recent Census data (1960) to take account of subsequent aging of the population, mortality, and migration between the United States and other countries. The adjustment was made by color within three age groupings: 45-49, 50-54, and 55-59.

After this step, each sample person has a weight which remains unchanged throughout the five-year life of the survey. The universe of study was thus fixed at the time of interview for the first cycle. No reweighting of the sample is made after subsequent cycles since the group of interviewed persons is an unbiased sample of the population group (in this case, males age 45-59) in existence at the time of the first cycle only.

Coding and Editing

Most of the questionnaire required no coding, the data being punched directly from precoded boxes. However, the various job description questions used the Bureau's standard occupation and industry codes that are used with the monthly CPS. Codes for the other "open end" questions were developed in conjunction with Ohio State from tallies of usually ten percent subsamples of the returns. A few of the questions required special handling. The attitudinal questions were especially difficult to handle. A sizable number of these were set aside and were ultimately coded by the professional staff of Ohio State and the Bureau.

The consistency edits for the questionnaire were completed on the computer. For the parts of the questionnaire which were similar to the CPS a modified CPS edit was used. For all other sections separate consistency checks were performed. None of the edits included an allocation routine which was dependent on averages or random information from outside sources, since such allocated data could not be expected to be consistent with data from subsequent surveys. However, where the answer to a question was obvious from others in the questionnaire, the missing answer was entered on the tape. For example if item 39a ("Is there a compulsory retirement age where you work?") was blank but legitimate entries appeared in 39b and c (At what age?" and "Would you like to work longer?") a "Yes" was inserted in 39a. In this case, only if 39a was marked "Yes" could 39b and c be filled; therefore the assumption was made that either the card punch operator failed to punch the item or the interviewer failed to mark it.

Appendix C

SAMPLING VARIATION

As in any survey based upon a sample, the data in this report are subject to sampling error, that is, variation attributable solely to the fact that they emerge from a sample rather than from a complete count of the population. Because the probabilities of a given individual's appearing in the sample are known, it is possible to estimate the sampling error, at least roughly. For example, it is possible to specify a "confidence interval" for each absolute figure or percentage, that is, the range within which the true value of the figure is likely to fall. For this purpose, the standard error of the statistic is generally used. One standard error on either side of a given statistic provides the range of values which has a two-thirds probability of including the true value. This probability increases to about 95 percent if a range of two standard errors is used.

Standard Errors of Percentages

In the case of percentages, the size of the standard error depends not only on the magnitude of the percentage, but also on the size of the base on which the percentage is computed. Thus, the standard error of 80 percent may be only 1 percentage point when the base is the total number of white men, but as much as 8 or 9 percentage points when the base is the total number of unemployed white men. Two tables of standard errors, one for whites and one for blacks, are shown below (Tables C_1 and C_2).

The method of ascertaining the appropriate standard error of a percentage[1] may be illustrated by the following example. There are about 5,000,000 white men in the age category 45 to 49 of whom 91 percent are estimated by our survey results to be married. Entering the table for white men with the base of 5,000,000 and the percentage 90, one finds the standard error to be 1.2 percent. Thus, chances are about two out of three that a complete enumeration would have resulted in a figure between 89.8 and 92.2 percent (91 ± 1.2), and 19 out of 20 that the figure would have been between 88.6 and 93.4 (91 ± 2.4).

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[1] Because the sample is not random, the conventional formula for the standard error of a percentage cannot be used. The entries in the tables have been computed on the basis of a formula suggested by the Bureau of the Census statisticians. They should be interpreted as providing an indication of the order of magnitude of the standard error, rather than a precise standard error for any specific item.

Table C $_1$: Standard Errors of Estimated Percentages of Whites
(68 chances out of 100)

Base of percentage (thousands)	Estimated Percentage				
	1 or 99	5 or 95	10 or 90	20 or 80	50
100	2.8	6.1	8.4	11.2	13.9
200	2.0	4.3	5.9	7.9	9.9
350	1.5	3.2	4.5	6.0	7.4
500	1.2	2.7	3.7	5.0	6.2
1000	0.9	1.9	2.6	3.5	4.4
5000	0.4	0.9	1.2	1.6	2.0
13,600	0.2	0.5	0.7	1.0	1.2

Table C $_2$: Standard Errors of Estimated Percentages of Blacks
(68 chances out of 100)

Base of percentage (thousands)	Estimated Percentage				
	1 or 99	5 or 95	10 or 90	20 or 80	50
25	2.7	6.0	8.2	10.9	13.7
50	1.9	4.2	5.8	7.7	9.7
100	1.4	3.0	4.1	5.5	6.8
200	1.0	2.1	2.9	3.9	4.8
750	0.5	1.1	1.5	2.0	2.5
1,400	0.4	0.8	1.1	1.5	1.8

Standard Errors of Differences Between Percentages

In analysing and interpreting the data, interest will perhaps most frequently center on the question whether observed differences in percentages are "real," or whether they result simply from sampling variation. If, for example, one finds on the basis of the survey that 3.3 percent of the whites, as compared with 7 percent of the blacks, are unable to work, the question arises whether this difference actually prevails in the population or whether it might have been produced by sampling variation. The answer to this question, expressed in terms of probabilities, depends on the standard error of the difference between the two percentages, which, in turn, is related to their magnitudes as well as to the size of the base of each. Although a precise answer to the question would require extended calculation, it is possible to construct charts that will indicate roughly, for different ranges of bases and different magnitudes of the percentages themselves, whether a given difference may be considered to be "significant," i.e., is sufficiently large that there is less than a 5 percent chance that it would have been produced by sampling variation alone. Such charts are shown below.

The magnitude of the quotient produced by dividing the difference between any two percentages by the standard error of the difference determines whether that difference is significant. Since the standard error of the difference depends only on the size of the percentages and their bases, for differences centered around a given percentage it is possible to derive a function which relates significant differences to the size of the bases of the percentages. If a difference around the given percentage is specified, the function then identifies those bases which will produce a standard error small enough for the given difference to be significant. The graphs which follow show functions of this type; each curve identifies combinations of bases that will make a given difference around a given percentage significant. For all combinations of bases on or to the northeast of a given curve, the given difference is the maximum difference necessary for significance.

Thus, to determine whether the difference between two percentages is significant, first locate the appropriate graph by selecting the one labeled with the percentage closest to the midpoint between the two percentages in question. When this percentage is under 50, the base of the larger percentage should be read on the horizontal axis of the chart and the base of the smaller percentage on the vertical axis. When the midpoint between the two percentages is greater than 50, the two axes are to be reversed. (When the midpoint is exactly 50 percent, either axis may be used for either base.) The two coordinates identify a point on the graph. The relation between this point and the curves indicates the order of magnitude required for a difference between the two percentages to be statistically significant at the 5 percent confidence level.[2]

All this may be illustrated as follows. Suppose in the case of white men the question is whether the difference between 27 percent (on a base of 6,000,000(3)) and 33 percent (on a base of 5,000,000) is significant. Since the percentages center on 30 percent, Figure 4 should be used. Entering the vertical axis of this graph with 6,000,000 and the horizontal axis with 5,000,000 provides a coordinate which lies to the northeast of the curve showing combinations of bases for which a difference of 5 percent is significant. Thus the 6 percentage point difference (between 27 and 33 percent) is significant.

As an example of testing for the significance of a difference between the two color groups consider the following. The data in our study show that for men in the age cohort 50-54, 95 percent of the whites (on a base of 4,629,000) and 91 percent of the blacks (on a base of 478,000) are in the labor force. To determine whether this inter-color difference is statistically significant Figure 1 is used because the midpoint (93 percent) between the two percentages is closer to 95 than 90.[4] Entering this graph at 478,000 on the horizontal axis for blacks (calibrated along the top of the Figure) and at 4,629,000 on the vertical axis for whites provides a coordinate which lies to the northeast of the 4 percent curve. Thus the 4 percentage point difference in labor force participation rate is significant.

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[2] The point made in footnote 1 is equally relevant here. The graphs should be interpreted as providing only a rough (and probably conservative) estimate of the difference required for significance.

[3] Each of the curves in the graphs of this appendix illustrates a functional relationship between bases expressed in terms of actual sample cases. For convenience, however, the axes of the graphs are labeled in terms of blown up estimates which simply reflect numbers of sample cases multiplied by a weighting factor.

[4] If both percentages are less (greater) than 50 and the midpoint between the two percentages is less (greater) than the percentage for which the curves were constructed, the actual differences necessary for significance will be slightly less than those shown on the curve. The required differences shown on the curves understate the actual differences necessary for significance when both percentages are less (greater) than 50 and the midpoint is greater (less) than the percentage for which the curves were constructed.

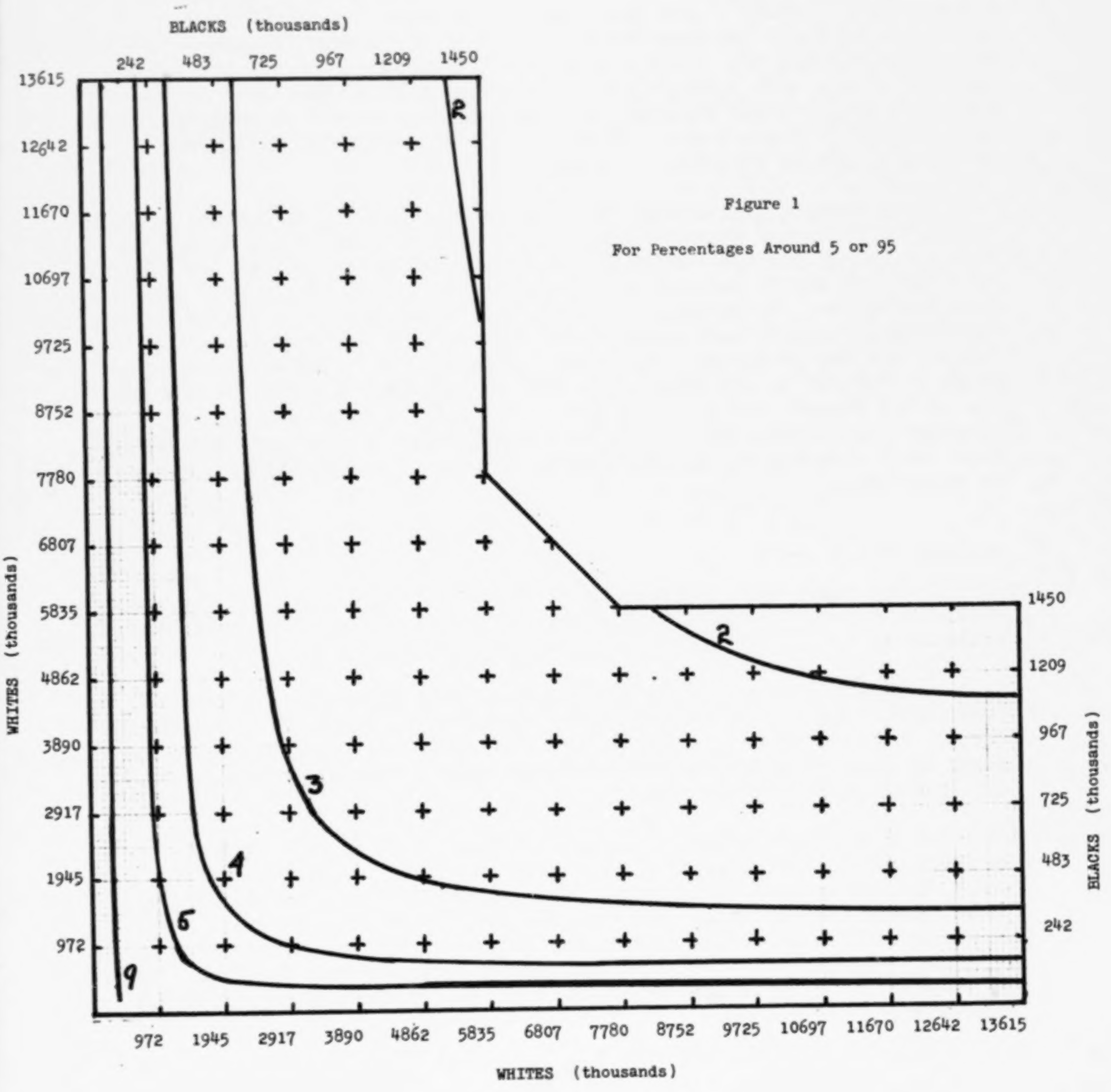

Figure 1

For Percentages Around 5 or 95

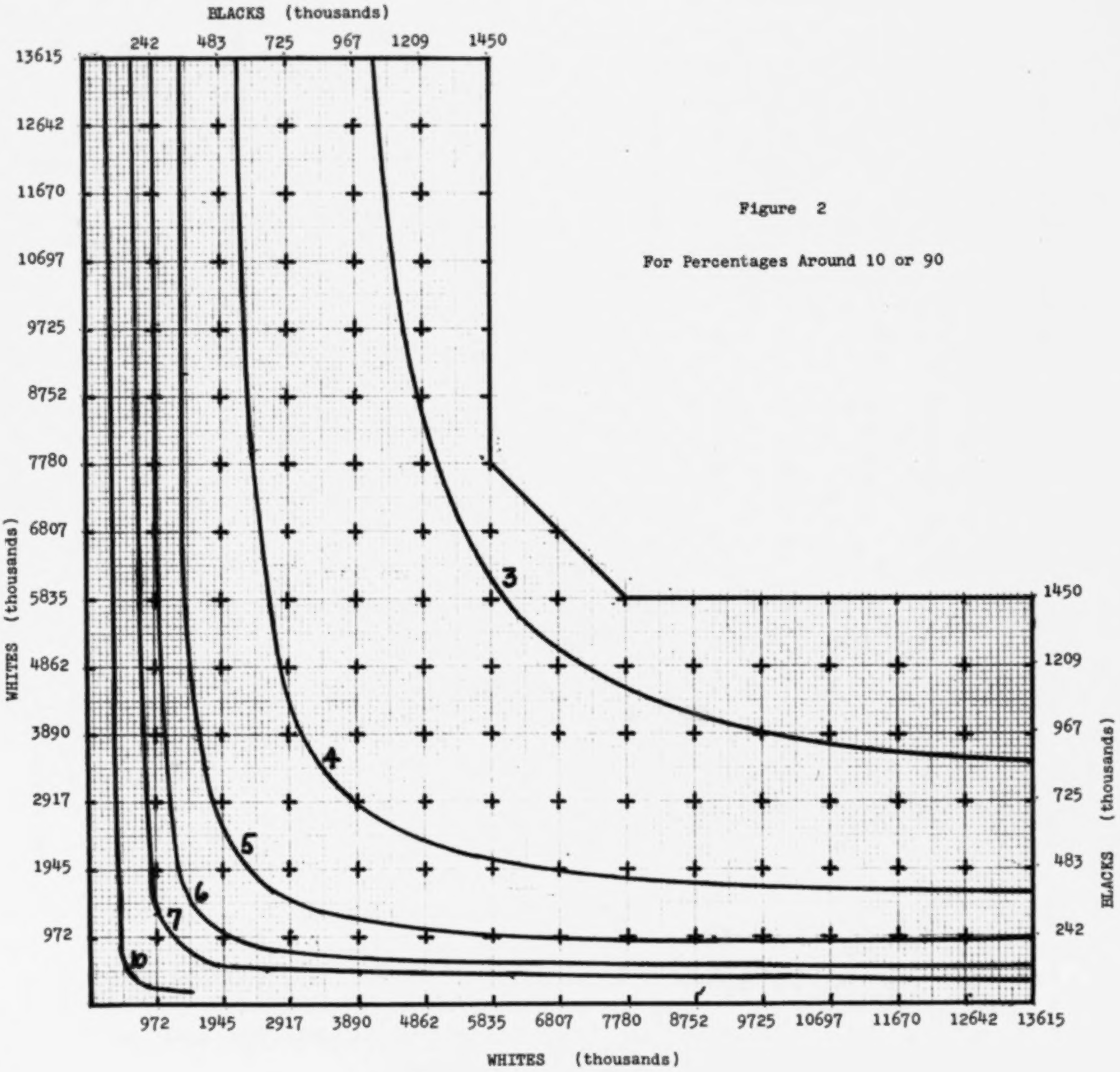

Figure 2

For Percentages Around 10 or 90

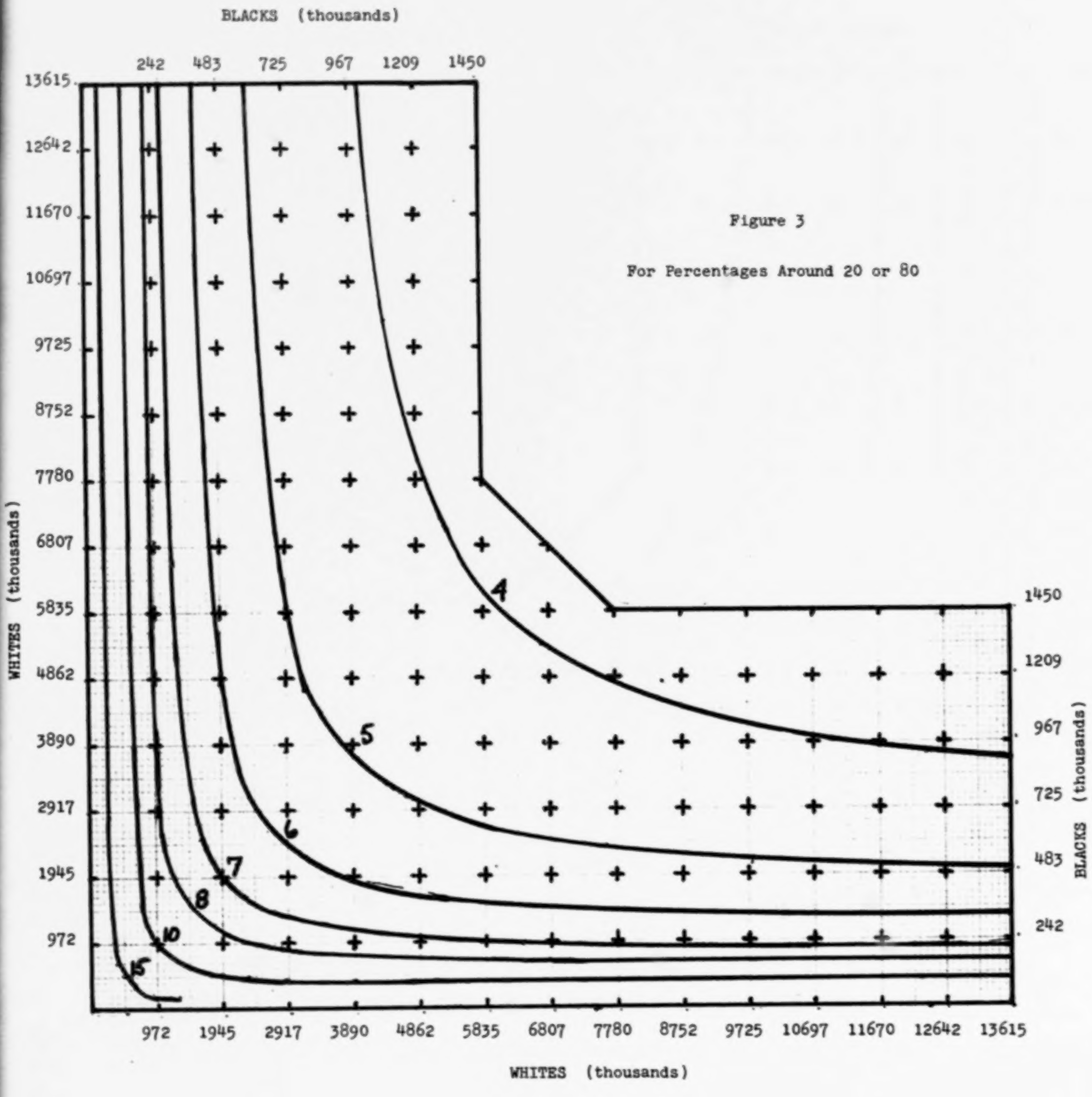

Figure 3

For Percentages Around 20 or 80

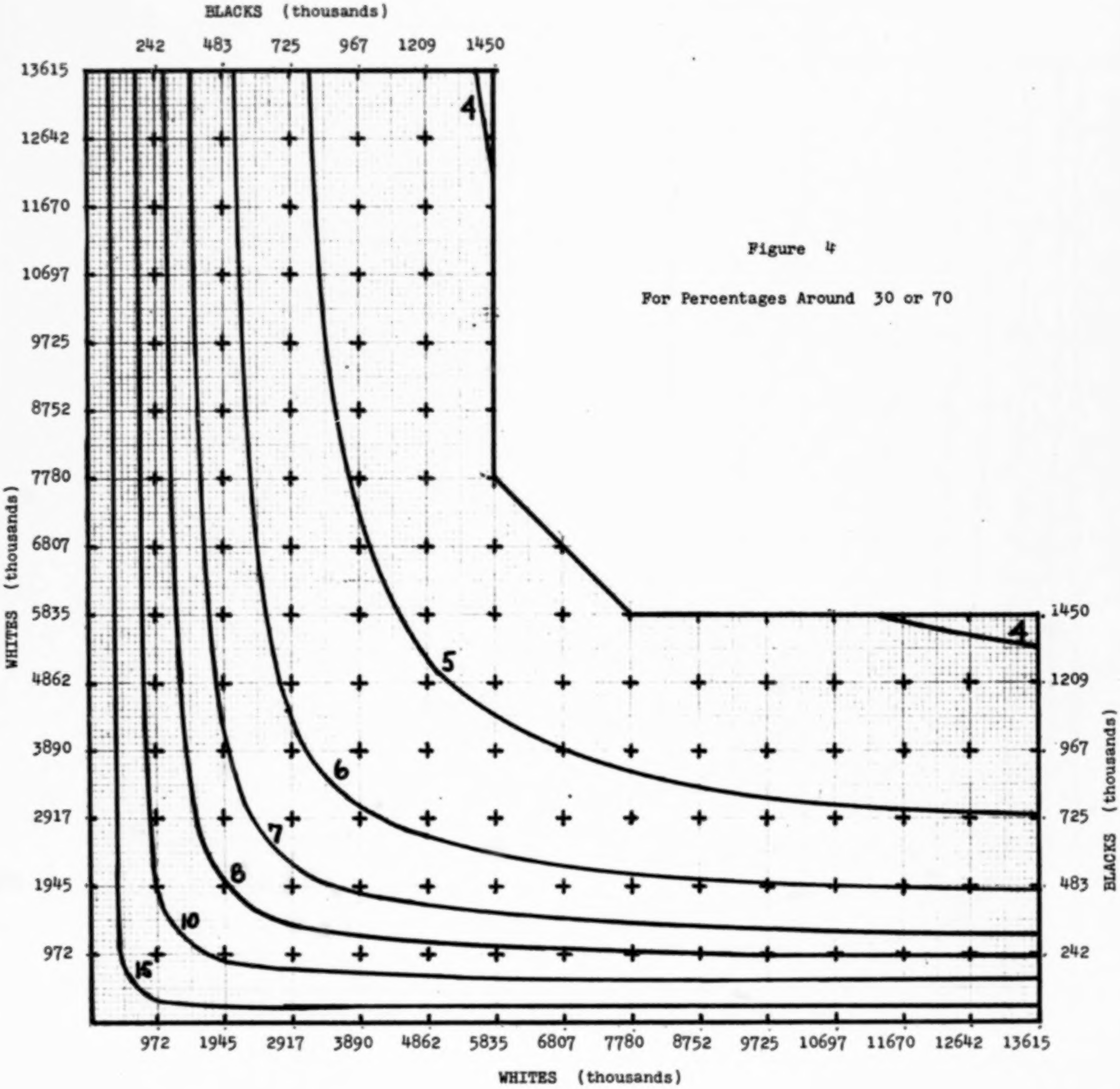

Figure 4

For Percentages Around 30 or 70

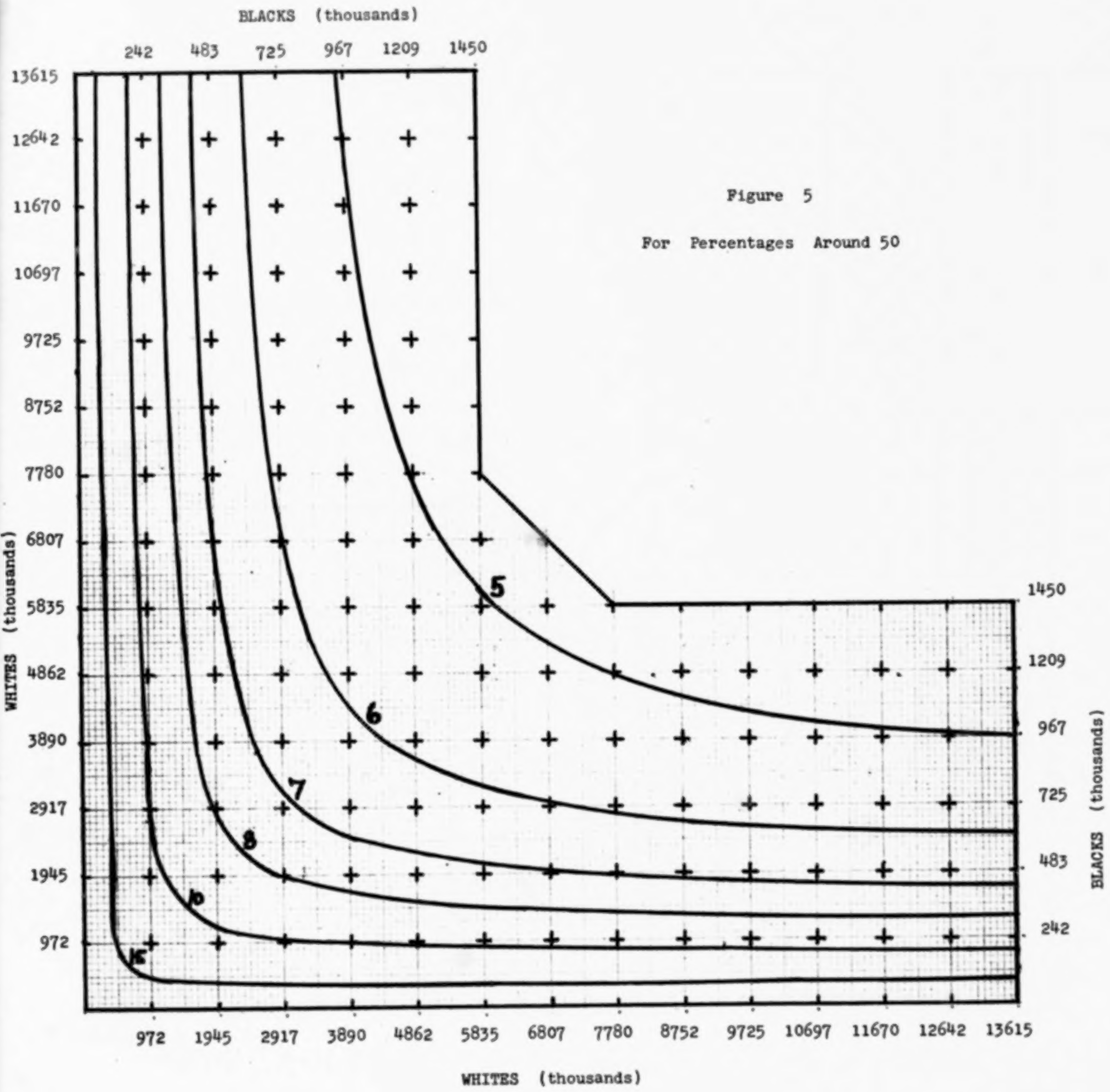

Figure 5

For Percentages Around 50

Appendix D

NON-RESPONSE RATES

For most of the variables presented in this volume there were varying numbers of men from whom information was not obtained, because either the response to the specific question was unclassifiable or no answer was given. Rarely (in the case of only ten variables) is the number of no responses larger than 10 percent of the relevant total. This appendix presents a table with the major variables used in the report (for both blacks and whites), the definition of the appropriate universe, the number of men in that universe, and the number and proportion of responses that were not ascertained.

Table D: Proportion of Non-Response Rates for Selected Variables, by Color

Variable name	Item number on interview schedule	Definition of universe	Universe number (thousands)	Not ascertained: Total number (thousands)	Not ascertained: Percent	Universe number	Not ascertained: Total number (thousands)	Not ascertained: Percent
			WHITES			BLACKS		
Labor force status	1-4	All respondents	13,615	0	0	1,405	0	0
Number of hours worked survey week	2a	All respondents who were at work survey week	12,017	0	0	1,184	0	0
Duration of unemployment	4b	All unemployed respondents	171	45	26.3	29	7	24.1
Occupation	6e	All respondents with work experience	13,608	30	0.2	1,400	7	0.5
		All respondents in labor force	12,826	26	0.2	1,269	4	0.3
		All employed respondents	12,655	26	0.2	1,240	4	0.3
		All employed wage and salary workers	9,942	19	0.2	1,091	4	0.4
Industry	6c	All respondents with work experience	13,608	15	0.2	1,400	2	0.1
		All respondents in labor force	12,826	15	0.1	1,269	1	0.1
		All employed respondents	12,655	15	0.1	1,240	1	0.1
		All employed wage and salary workers	9,942	7	0.1	1,091	1	0.1
Class of worker	6d	All respondents with work experience	13,608	8	0.0	1,400	1	0.1
		All employed respondents	12,655	8	0.0	1,240	0	0.0
Length of service	7	All employed respondents	12,655	96	0.8	1,240	1	0.1
Rate of pay	8	All wage and salary workers with work experience except operators of small incorporated family enterprises	10,742	356	3.3	1,244	44	3.5
		All employed wage and salary workers except operators of small incorporated family enterprises	9,932	306	3.1	1,091	31	2.8
		All employed wage and salary workers at work survey week except operators of small incorporated family enterprises	9,376	287	3.1	1,039	31	3.0
Job seeking intentions	10a	All respondents out of labor force	782	61	7.8	131	6	4.6
Weeks worked in 1965	11a	All respondents with work experience	13,608	232	1.7	1,400	26	1.8
Weeks unemployed in 1965	12a, 12b, 13b	All respondents with work experience	13,608	370	2.7	1,400	58	4.1
Weeks out of labor force in 1965	14	All respondents with work experience	13,608	370	2.7	1,400	58	4.1
Spells of unemployment in 1965	12c	All respondents with work experience in 1965	13,040	291	2.2	1,294	34	2.6
Usual number of hours worked per week	11b	All respondents with work experience in 1965	13,040	435	3.3	1,294	44	3.4
Location of first job	18	All respondents with work experience	13,608	1,665	12.2	1,400	179	12.8
Location of longest job	17	All respondents with work experience	13,608	712	5.2	1,400	89	6.4
Industry of first job	18	All respondents with work experience	13,608	230	1.7	1,400	34	2.4
Industry of longest job	17	All respondents with work experience	13,608	172	1.3	1,400	17	1.2
Industry of previous job	16	All respondents with work experience whose current or last job began in 1961 or later	3,773	152	4.0	460	16	3.5
Occupation of first job	18	All respondents with work experience	13,608	301	2.2	1,400	47	3.4
Occupation of longest job	17	All respondents with work experience	13,608	228	1.7	1,400	22	1.6
Occupation of previous job	16	All respondents with work experience whose current or last job began in 1961 or later	3,773	237	6.3	460	38	8.3

Table D: continued

Variable name	Item number on interview schedule	Definition of universe	Universe number (thousands)	Not ascertained		Universe number	Not ascertained	
				Total number (thousands)	Percent		Total number (thousands)	Percent
			WHITES			BLACKS		
Length of service in first job	18	All respondents with work experience	13,608	361	2.7	1,400	77	5.5
Length of service in longest job	17	All respondents with work experience	13,608	467	3.4	1,400	70	5.0
Length of service in previous job	16	All respondents with work experience whose current or last job began in 1961 or later	3,773	122	3.2	460	19	4.1
Best occupational assignment of career	19	All respondents with work experience	13,608	172	1.3	1,400	31	2.2
Attitudes toward present job	24	All employed respondents	12,655	415	3.3	1,240	60	4.8
		All employed wage and salary workers	9,942	70	.7	1,091	23	2.1
More important thing about a job	27,38	All respondents with work experience	13,608	552	4.0	1,400	85	6.1
		All respondents in labor force	12,826	453	3.5	1,269	67	5.3
		All employed wage and salary workers	9,942	316	3.2	1,091	50	4.6
Whether would work if received enough money to live on	28a,36a	All respondents in labor force	12,826	881	0.7	1,269	21	1.6
		All employed wage and salary workers	9,942	35	0.4	1,091	13	1.2
Reaction to hypothetical job offer inside local area	29a	All employed respondents	12,655	1,520	12.0	1,240	149	12.0
Reaction to hypothetical job offer outside local area	29b	All employed respondents	12,655	1,204	9.5	1,240	131	10.6
Reaction to hypothetical loss of job	30	All employed wage and salary workers	9,942	148	1.5	1,091	29	2.6
Reaction to hypothetical job offer	37a	All respondents out of labor force	782	82	10.5	131	12	9.2
Compulsory retirement	39a	All employed wage and salary workers	9,942	39	0.4	1,091	12	1.1
Compulsory retirement age	39b	All employed wage and salary workers covered by compulsory retirement	4,512	66	1.5	476	21	4.4
Expected age of retirement	40a	All respondents in labor force except those who have no expectations of retiring	10,205	177	1.7	941	19	2.0
Whether will take another job after retirement from regular job	41a	All respondents with work experience except those who do not expect to retire	10,675	254	2.4	1,045	18	1.7
Health of respondent	43	All respondents with work experience	13,608	494	3.6	1,400	11	0.8
		All respondents in labor force	12,826	476	3.7	1,269	7	0.6
		All employed respondents	12,655	468	3.7	1,240	7	0.6
		All employed wage and salary workers	9,942	438	4.4	1,091	6	0.5
Duration of health problem	44	All respondents with work experience who have a health problem	3,546	113	3.2	383	10	2.6
		All employed wage and salary workers with a health problem	2,018	84	4.2	207	6	2.9
Respondent's rating of health	45	All respondents with work experience	13,608	487	3.6	1,400	47	3.4
		All respondents in labor force	12,826	476	3.7	1,269	43	3.4
		All employed respondents	12,655	468	3.7	1,240	43	3.5
		All employed wage and salary workers	9,942	359	3.6	1,091	37	3.4
Highest year of school completed	48	All respondents with work experience	13,608	75	0.6	1,400	8	0.6
Extent of vocational training received outside regular school	49-53	All respondents with work experience	13,608	82	0.6	1,400	10	0.7

Table D: continued

Variable name	Item number on interview schedule	Definition of universe	Universe number (thousands)	Not ascertained		Universe number (thousands)	Not ascertained	
				Total number (thousands)	Percent		Total number (thousands)	Percent
			WHITES			BLACKS		
Home ownership	54	All employed respondents	12,655	232	1.8	1,240	29	2.3
Total earnings of respondent's wife in 1965	63b	All respondents with work experience	13,608	306*	2.2	1,400	45*	3.2
Total family income less earned income of respondent in 1965	63-74	All respondents	13,615	3,132*	23.0	1,405	310*	22.1
		All respondents in labor force	12,826	2,947*	21.6	1,269	276*	21.7
		All employed respondents	12,655	2,902*	22.9	1,240	271	21.9
		All employed wage and salary workers	9,942	2,175*	21.9	1,091	216	19.8
Total net family assets	55-62	All respondents with work experience	13,608	4,471*	32.8	1,400	513*	36.6
Length of residence in county	76	All employed respondents	12,655	271	2.1	1,240	20	1.6
Weeks worked by respondent's wife in 1965	92	All respondents with work experience	13,608	74	.5	1,400	14	1.0
Hours worked by respondent's wife in 1965	93	All respondents with work experience	13,608	138	1.1	1,400	23	1.6

* Includes "don't know"

Appendix E*

LABOR MARKET CHARACTERISTICS OF BLACKS AND WHITES, STANDARDIZED FOR OCCUPATION

The powerful impact of occupation on labor market behavior, underscored extensively in this report, causes an inter-color difference in occupational distribution to bias comparisons of the behavior of whites and blacks. For example, the analysis in Chapter 3 reveals that the labor force participation rate of whites exceeds that of blacks, but that when occupation is employed as a control, the difference in labor force participation becomes much smaller. Thus, much of the inter-color behavioral difference is attributable to a difference in occupational distribution, i.e., relatively high participation rates for white collar workers coupled with a greater likelihood for whites to be in white collar occupations cause the participation rate for whites to exceed that for blacks. At many points in this report a simple arithmetic procedure has been used to allow inter-color comparisons of labor market behavior which are not distorted by the differences in occupational distribution. In this appendix the mechanics of this standardization procedure are discussed and the results of a number of standardizations are summarized.

Conceptually, the value of a measure of any dimension of labor market activity can be considered as the weighted mean of the values of the measure for individuals in each of the ten major occupation groups. For example, the weighted mean of the participation rates of whites in each occupation group is identical to the participation rate for all whites; the weight for each occupation group, of course, is simply the number (or percent) in that group. The standardization procedure employed in this report involves determining the value of a measure of the labor market activity (e.g., unemployment rate) of blacks using the values of the measure for blacks in each occupation and the occupational distribution of whites as weights. Thus, the labor force participation rates of blacks in each occupation are weighted according to the occupational distribution of whites in determining the standardized participation rate for blacks. When a standardized measure for blacks is compared with the actual value of the measure for whites, the comparison is between two means computed using the same weights. Thus, inter-color differences in occupational distribution which are eliminated through the use of common weights, cannot bias the comparison.

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* This appendix was prepared by Ronald M. Schmidt.

Although the use of this standardization procedure substantially facilitates and clarifies the inter-color comparisons contained in this report, there are some methodological and conceptual problems associated with its use. The first problem occurs because small cell sizes cause the estimate of the labor market characteristic of blacks in some occupations (e.g., salesmen) to be extremely variable. Standardization using the occupational distribution of whites involves an increase in the weight assigned to those occupations, thus causing the standardized measure for blacks to have a larger variance than the actual measure.

Two additional problems associated with the use of the standardization procedure are conceptual and relate to how the results of the inter-color comparisons should be interpreted. If the value of a standardized measure for blacks turns out to be identical to the value of the actual measure for whites, it is not clear that one can conclude that inter-color differences in occupational distribution are solely responsible for the inter-color differences in labor market behavior reflected by this measure. First, since substantial inter-color differences of opposite direction may net out, and thus be concealed when a weighted mean is computed, inter-color comparisons using the standardized measure may leave much that is important unsaid. Second, it seems reasonable to hypothesize that labor market behavior within a given occupational category and occupational distribution are not independent. Undoubtedly, the behavior of blacks is influenced by the kinds of jobs that they can obtain, and this range of occupational choice is circumscribed by the occupational distribution of blacks. Standardization involves assigning blacks a different occupational distribution which could effect changes in the labor market behavior of blacks in each occupation group. To the extent that changes of this kind would occur, inter-color comparisons using standardized measures are biased. Despite its limitations, this procedure is an effective shorthand method for constructing inter-color comparisons.

Table E: Labor Market Characteristics of Blacks and Whites, Standardized for Occupation

Measure of labor market behavior	Description of universe	Value of measure for blacks	Value of measure for whites	Standardized value for blacks
Labor force participation rate	Men with work experience	90.6 percent	94.3 percent	94.0 percent
Average number of hours worked during survey work	Men at work	38.9 hours	42.0 hours	40.4 hours
Class of worker: proportion who are self-employed	Men with work experience	10.9 percent	19.5 percent	23.4 percent
Average length of service in current job	Employed men	10.4 years	14.3 years	13.4 years
Mean hourly rate of pay	Employed wage and salary workers	$2.22 per hour	$3.51 per hour	$2.62 per hour
Average number of weeks worked in 1965	Men with work experience	43.5 weeks	47.1 weeks	45.7 weeks
Average number of weeks of unemployment in 1965	Men with work experience	2.7 weeks	1.1 weeks	1.8 weeks
Average number of spells of unemployment in 1965 (1)	Men who worked in 1965	.29 spells	.13 spells	.22 spells
Proportion who like their job very much(1)	All those employed	52.8 percent	59.2 percent	57.3 percent
Proportion who consider wages the more important thing about a job	Men with work experience who had no employment in 1965	44.1 percent	18.9 percent	37.3 percent
Proportion who would not take a job in the same area for any pay increase	Employed men	38.9 percent	45.3 percent	47.2 percent
Proportion who would continue working after retiring from their regular job	Men in the labor force	61.5 percent	56.7 percent	63.5 percent
Average score on propensity to retire index	Employed wage and salary workers	5.3	5.5	5.2

(1) This measure was standardized using the four major occupation groups, rather than the more detailed ten occupation categories.

Appendix F

INTERVIEW SCHEDULE

Form Approved: Budget Bureau No. 41-R2316; Approval Expires April 30, 1967

FORM LGT-101
(4-6-66)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

NATIONAL LONGITUDINAL SURVEYS

SURVEY OF WORK EXPERIENCE
OF MEN 45 – 59
1966

NOTICE – Your report to the Census Bureau is confidential by law (Title 13 U.S. Code). It may be seen only by sworn Census employees and may be used only for statistical purposes.

1. Control number
2. Line number of respondent
3. Address
4. Name of respondent
5. Interviewed by:
6. Date

RECORD OF CALLS

Date	Time	Comments
1.	a.m. p.m.	
2.	a.m. p.m.	
3.	a.m. p.m.	
4.	a.m. p.m.	

RECORD OF INTERVIEW

Interview time		Date completed	Comments
Began	Ended		
a.m. p.m.	a.m. p.m.		

NONINTERVIEW REASON

1 ☐ Temporarily absent

2 ☐ No one home

3 ☐ Refused

4 ☐ Moved or left household – *Enter new address* ____________________

5 ☐ Other – *Specify* ____________________

TRANSCRIPTION FROM HOUSEHOLD RECORD CARD	Item 22	Items 23–25	
	1 ☐ Owned or being bought	1 ☐ A	4 ☐ D
	2 ☐ Rented	2 ☐ B	5 ☐ E
	3 ☐ No cash rent	3 ☐ C	

Notes

USCOMM-DC

A. CURRENT LABOR FORCE STATUS

1. What were you doing most of LAST WEEK –

{Working
{Looking for work

or something else?

1 ☐ WK – Working – *Skip to 2a*

2 ☐ J – With a job but not at work

3 ☐ LK – Looking for work

4 ☐ R – Retired

5 ☐ S – Going to school

6 ☐ U – Unable to work – *Skip to 5a*

7 ☐ OT – Other – *Specify*

____

2. Did you do any work at all LAST WEEK, not counting work around the house?

(Note: If farm or business operator in household, ask about unpaid work.)

1 ☐ Yes   x ☐ No – *Skip to 3*

2a. How many hours did you work LAST WEEK at all jobs? . . . . ______

2b. INTERVIEWER CHECK ITEM

1 ☐ 49 or more – *Skip to 6*

2 ☐ 1–34 – *Ask 2c*

3 ☐ 35–48 – *Ask 2d*

2c. Do you USUALLY work 35 hours or more a week at this job?

1 ☐ Yes – What is the reason you worked less than 35 hours LAST WEEK?

2 ☐ No – What is the reason you USUALLY work less than 35 hours a week?

(Mark the appropriate reason)

01 ☐ Slack work

02 ☐ Material shortage

03 ☐ Plant or machine repair

04 ☐ New job started during week

05 ☐ Job terminated during week

06 ☐ Could find only part-time work

07 ☐ Holiday (legal or religious)

08 ☐ Labor dispute

09 ☐ Bad weather

10 ☐ Own illness

11 ☐ On vacation

12 ☐ Too busy with housework, school, personal business, etc.

13 ☐ Did not want full-time work

14 ☐ Full-time work week under 35 hours

15 ☐ Other reason – *Specify*

____

(If entry in 2c, skip to 6 and enter job worked at last week.)

2d. Did you lose any time or take any time off LAST WEEK for any reason such as illness, holiday, or slack work?

1 ☐ Yes – How many hours did you take off? ______

2 ☐ No

(Correct 2a if lost time not already deducted; if 2a reduced below 35, fill 2c, otherwise skip to 6.)

2e. Did you work any overtime or at more than one job LAST WEEK?

1 ☐ Yes – How many extra hours did you work? . . . . ______

2 ☐ No

(Correct 2a if extra hours not already included and skip to 6.)

(If "J" in 1, skip to 3a.)

3. Did you have a job (or business) from which you were temporarily absent or on layoff LAST WEEK?

1 ☐ Yes   x ☐ No – *Skip to 4*

3a. Why were you absent from work LAST WEEK?

1 ☐ Own illness

2 ☐ On vacation

3 ☐ Bad weather

4 ☐ Labor dispute

5 ☐ New job to begin within 30 days – *Ask 4b2*

6 ☐ Temporary layoff (Under 30 days) } *Ask 4b3*

7 ☐ Indefinite layoff (30 days or more or no definite recall date) } *Ask 4b3*

8 ☐ Other – *Specify*

____

3b. Are you getting wages or salary for any of the time off LAST WEEK?

1 ☐ Yes

2 ☐ No

3 ☐ Self-employed

3c. Do you usually work 35 hours or more a week at this job?

1 ☐ Yes   2 ☐ No

(Skip to 6 and enter job held last week.)

Notes

FORM LGT-101 (4-6-68)

A. CURRENT LABOR FORCE STATUS – Continued

(If "LK" in 1, skip to 4a.)

4. Have you been looking for work during the past 4 weeks?

1 ☐ Yes

x ☐ No – *Skip to 5a*

4a. What have you been doing in the last 4 weeks to find work?

(Mark all methods used; do not read list.)

Checked with –

1 ☐ Public employment agency
2 ☐ Private employment agency
3 ☐ Employer directly
4 ☐ Friends or relatives

5 ☐ Placed or answered ads
6 ☐ Nothing – *Skip to 5a*
7 ☐ Other – *Specify – e.g., MDTA, union or professional register, etc.*

____

4a.1 When did you last do this (any of these)?

1 ☐ LAST week (or this week)
2 ☐ 2 weeks ago
3 ☐ 3 weeks ago
4 ☐ 4 or more weeks ago – *Ask 4b1*

4b. 1) How many weeks have you been looking for work?

2) How many weeks ago did you start looking for work?

3) How many weeks ago were you laid off?

Number of weeks __________

4c. Have you been looking for full-time or part-time work?

1 ☐ Full-time work

2 ☐ Part-time work

4d. Is there any reason why you could not take a job LAST WEEK?

1 ☐ Yes →
- 2 ☐ Already has a job
- 3 ☐ Temporary illness
- 4 ☐ Going to school
- 5 ☐ Other – *Specify*

6 ☐ No

____

4e. When did you last work at a full-time job or business lasting two consecutive weeks or more?

1 ☐ 1961 or later – *Specify month and year*

Month __________ Year _____

2 ☐ Before 1961

} *Enter last full-time civilian job lasting 2 weeks or more in 6.*

3 ☐ Never worked full time 2 weeks or more
4 ☐ Never worked at all

} *Skip to 54*

5a. When did you last work at a regular full or part-time job or business?

1 ☐ 1961 or later – *Specify month and year and ask 5b*

Month __________ Year ______

2 ☐ Before 1961 – *Ask 5b*
3 ☐ Never worked – *Skip to 54*

5b. Why did you leave that job?

1 ☐ Personal, family, or school reasons
2 ☐ Health
3 ☐ Retirement or old age
4 ☐ Seasonal job completed
5 ☐ Slack work or business conditions
6 ☐ Temporary nonseasonal job completed
7 ☐ Unsatisfactory work arrangements (hours, pay, etc.)
8 ☐ Other

(Go to 6 and describe that job)

6. DESCRIPTION OF JOB OR BUSINESS

6a. For whom did you work? *(Name of company, business, organization or other employer)*

____

6b. In what city and State is . . . located?

City ____________________

State ____________________

6c. What kind of business or industry is this? *(For example, TV and radio manufacturer, retail shoe store, State Labor Department, farm.)*

____

Census use only

6d. Were you –

1 ☐ P – An employee of PRIVATE company, business, or individual for wages, salary, or commission?
2 ☐ G – A GOVERNMENT employee (Federal, State, county, or local)?
3 ☐ O – Self-employed in OWN business, professional practice, or farm?

(If not a farm)

Is this business incorporated?

☐ Yes ☐ No

4 ☐ WP – Working WITHOUT PAY in family business or farm?

6e. What kind of work were you doing? *(For example, electrical engineer, stock clerk, typist, farmer.)*

____

Census use only

A. CURRENT LABOR FORCE STATUS – Continued		Do not use
7. When did you start working at this job or business? *(If before 1965, enter year only; if 1965 or later, enter month and year.)*	7. Year and/or month ______	
CHECK ITEM A 1 ☐ "P" or "G" in item 6d – *Ask 8* 2 ☐ "O" or "WP" in item 6d – *Skip to Check Item B*		
8. How much do you usually earn at this job before deductions? *(If amount given per hour, record dollars and cents; otherwise, round to the nearest dollar.)*	8. $ ______ per ______	
9a. Did you ever do any other kind of work for *(Name of employer)*?	9a. 1 ☐ Yes – *Ask 9b* 2 ☐ No – *Skip to Check Item B*	
b. What kind of work were you doing when you started with . . . ? *If "Other," specify here* ______	b. 1 ☐ Same as current (last) job 2 ☐ Other	
c. Of the kinds of work you have done for . . ., which did you like best? *If "Other," specify here* ______	c. 1 ☐ Same as current (last) job 2 ☐ Same as first job 3 ☐ Other	
d. How long did you work as *(entry in 9c)* with . . . ? *(If less than 1 year, enter number of months.)*	d. Years OR Months – *If less than 1 year*	
e. *(If entry in 9c is different from entry in 6e)* How did you happen to stop working as *(entry in 9c)* with . . . ? ______ ______		
CHECK ITEM B Respondent is in – 1 ☐ Labor Force Group "A" ("WK" in 1 or "Yes" in 2 or 3) } *Skip to 11a* 2 ☐ Labor Force Group "B" ("LK" in 1 or "Yes" in 4) } *Skip to 11a* 3 ☐ All others – *Ask 10a*		
10a. Do you intend to look for work of any kind in the next 12 months? *If "Maybe," specify here* ______ ______	10a. 1 ☐ Yes – definitely 2 ☐ Yes – probably 3 ☐ Maybe – it depends on 4 ☐ No 5 ☐ Don't know	
b. Is there any particular reason why you are not looking for work at this time? *(Specify below, then mark one box.)* ______ ______ ______	b. 1 ☐ Training or school 2 ☐ Personal or family 3 ☐ Health reasons 4 ☐ Believe no work available 5 ☐ Do not want work at this time of year 6 ☐ Retired 7 ☐ Other or no reason	
Notes		

FORM LGT-101 (4-5-66)

B. WORK EXPERIENCE IN 1965			Do not use
11a. Now I have some questions on your work experience during 1965. In how many different weeks did you work (either full or part time) in 1965 (not counting work around the house)? *(Include paid vacations and paid sick leave.)*		**11a.** Number of weeks __________ ☐ None – *Skip to 13a*	
b. During the weeks that you worked in 1965, how many hours per week did you usually work? *Enter number of hours, then mark box* __________		**b.** 1 ☐ Under 15 2 ☐ 15–34 3 ☐ 35–40 4 ☐ 41–47 5 ☐ 48 or more	
CHECK ITEM C	1 ☐ 52 weeks in 11a – *Ask 12a* 2 ☐ 1–51 weeks in 11a – *Skip to 12b*		
12a. Did you lose any full weeks of work in 1965 because you were on layoff from a job or lost a job?		**12a.** 1 ☐ Yes – How many weeks? ________ *(Adjust item 11a and skip to 12c)* 2 ☐ No – *Skip to Check Item D*	
b. You say you worked *(entry in 11a)* weeks in 1965. In any of the remaining *(52 weeks minus entry in 11a)* ______ weeks were you looking for work or on layoff from a job?		**b.** 1 ☐ Yes – How many weeks? ________ *(Ask 12c)* 2 ☐ No – *Skip to Check Item D*	
c. Were all of these weeks in one stretch?		**c.** 1 ☐ Yes, 1 2 ☐ No, 2 3 ☐ No, 3, or more *Skip to Check Item D*	
13a. *(For those who did not work in 1965)* Even though you did not work in 1965, did you spend any time trying to find work or on layoff from a job?		**13a.** 1 ☐ Yes – *Ask 13b* 2 ☐ No – *Skip to 14 and ask about 52 weeks*	
b. How many different weeks were you looking for work or on layoff from a job? *Enter number of hours, then mark box* __________		**b.** 1 ☐ 1–4 2 ☐ 5–10 3 ☐ 11–14 4 ☐ 15–26 5 ☐ 27–39 6 ☐ 40–52	
CHECK ITEM D	*Refer to items 11a, 12b, and 13b* 1 ☐ All weeks accounted for – *Skip to Check Item E* 2 ☐ Some weeks not accounted for – *Ask 14*		
14. Now let me see. During 1965 there were about *(52 weeks minus entries in items 11a, 12b, or 13b)* ______ weeks that you were not working or looking for work. What would you say was the main reason that you were not looking for work? *If "Other," specify here* ______________________________		**14.** 1 ☐ Ill or disabled and unable to work 2 ☐ Retired 3 ☐ Couldn't find work 4 ☐ Vacation 5 ☐ Other	
CHECK ITEM E	1 ☐ "O" in 6d – *Ask 15a* 2 ☐ "P," "G," or "WP" in 6d – *Skip to 15b*		
15a. I see you are self-employed. Did you work for anyone else for wages or salary in 1965?		**15a.** 1 ☐ Yes – *Ask 15b* 2 ☐ No – *Skip to Check Item F*	
b. In 1965, for how many employers did you work?		**b.** Number of employers __________ 1 ☐ Did not work in 1965	

Notes

C. WORK EXPERIENCE BEFORE 1965

Do not use

CHECK ITEM F

Refer to item 7
1 ☐ Job recorded in 7 began in 1961 or later – *Ask 16a*
2 ☐ All others – *Skip to 17a*

16a. I'd like to know about the job you had just before you started working at (*entry in 6a*). What kind of work were you doing when you left your previous job?

b. What kind of business or industry was that?

c. Were you –
1) An employee of PRIVATE company, business, or individual for wages, salary, or commission?
2) A GOVERNMENT employee (Federal, State, county, or local)?
3) Self-employed in OWN business, professional practice, or farm?
4) Working WITHOUT PAY in family business or farm?

16c.
1 ☐ P – Private
2 ☐ G – Government
3 ☐ O – Self-employed
4 ☐ WP – Without pay

d. Where was that job located? . . . .

d. City or county

State

e. In what year did you START working at that job? . . . .

e. Year

f. In what year did you STOP working at that job? . . . .

f. Year

g. Then you worked there for ("*f*" *minus* "*e*") _____ years, is that correct?

1 ☐ Yes
2 ☐ No – *Correct dates in "e" and "f" as necessary*

g. Number of years ________
OR if less than 1 year –
1 ☐ 6 months or more
2 ☐ Less than 6 months

h. How did you happen to leave that job?

17a. Now, of all the jobs you have ever had, I'd like to know about the one at which you worked longest. For whom did you work then?

17a.
1 ☐ Same as current (last) job
2 ☐ Same as job before current (last) job
} *Ask 17b and skip to 18*
3 ☐ Other – *Ask 17b–i*

b. What kind of work were you doing longest on that job?

c. What kind of business or industry was that?

d. Were you –
1) An employee of PRIVATE company, business, or individual for wages, salary, or commission?
2) A GOVERNMENT employee (Federal, State, county, or local)?
3) Self-employed in OWN business, professional practice, or farm?
4) Working WITHOUT PAY in family business or farm?

d.
1 ☐ P – Private
2 ☐ G – Government
3 ☐ O – Self-employed
4 ☐ WP – Without pay

e. Where was that job located? . . . .

e. City or county

State

f. In what year did you START working at that job? . . . .

f. Year

g. In what year did you STOP working at that job? . . . .

g. Year

C. WORK EXPERIENCE BEFORE 1965 – Continued

Do not use

17h. Then you worked there for (*"g" minus "f"*) ________ years, is that correct?
1 ☐ Yes 2 ☐ No – *Correct dates in "f" and "g" as necessary*

17h. Number of years ________

i. How did you happen to leave that job?

____

____

18a. Let's look back now to when you stopped going to school full-time, I'd like to know about the first job at which you worked at least a month.

For whom did you work then?

18a.
1 ☐ Same as current job
2 ☐ Same as job before current (last) job
3 ☐ Same as longest job
} *Ask 18b and skip to 19*
4 ☐ Other – *Ask 18b–i*

b. What kind of work were you doing when you started working on that job?

____

c. What kind of business or industry was that?

____

d. Were you –
1) An employee of PRIVATE company, business, or individual for wages, salary, or commission?
2) A GOVERNMENT employee (Federal, State, county, or local)?
3) Self-employed in OWN business, professional practice, or farm?
4) Working WITHOUT PAY in family business or farm?

d.
1 ☐ P – Private
2 ☐ G – Government
3 ☐ O – Self-employed
4 ☐ WP – Without pay

e. Where was that job located? . . . .

e. City or county
State

f. In what year did you START working at that job? . . . .

f. Year

g. In what year did you STOP working at that job? . . . .

g. Year

h. Then you worked there for (*"g" minus "f"*) ________ years, is that correct?
1 ☐ Yes 2 ☐ No – *Correct dates in "f" and "g" as necessary*

h. Number of years ________

i. How did you happen to leave that job?

____

____

19. Now, instead of talking about your employers, let's talk about the kinds of work you have done. I'd like you to think about the best KIND of work you have ever done. What kind of work was that?

____

20. Altogether, how long have you worked as (*entry in 19*)?

20.
1 ☐ Under a year – Months ________
2 ☐ 1–4 years
3 ☐ 5–9 years
4 ☐ 10–19 years
5 ☐ 20 years or more

CHECK ITEM G
1 ☐ Entry in item 19 same as entry in item 6e – *Skip to Check Item H*
2 ☐ Entry in item 19 different from entry in item 6e – *Ask 21*

C. WORK EXPERIENCE BEFORE 1965 – Continued		Do not use
21. How old were you when you last worked as (*entry in 19*)?	**21.** Age ____________	
22. Would you like to be working as (*entry in 19*) now? *If "No," specify here* ______________________	**22.** 1 ☐ Yes – *Ask 23* 2 ☐ No – Why not? – *Specify and skip to Check Item H*	
23. Why would you say you are not working as (*entry in item 19*)? ______________________		

Notes

D. ATTITUDES TOWARD WORK

CHECK ITEM H	Respondent is in – 1 ☐ Labor Force Group "A" ("WK" in 1 or "Yes" in 2 or 3) – *Ask 24* 2 ☐ Labor Force Group "B" ("LK" in 1 or "Yes" in 4) – *Skip to 35a* 3 ☐ All others – *Skip to 37a*	

24. How do you feel about the job you have now? Do you . . . . Respondent's comments: ______________________ ______________________	**24.** 1 ☐ Like it very much? 2 ☐ Like it fairly well? 3 ☐ Dislike it somewhat? 4 ☐ Dislike it very much? } *Enter respondent's comments*	
25. What are the things you like best about your job? (*Try to obtain three things.*) 1. ______________________ 2. ______________________ 3. ______________________		
26. What are the things about your job that you don't like so well? (*Try to obtain three things.*) 1. ______________________ 2. ______________________ 3. ______________________		
27. What would you say is the more important thing about any job – good wages or liking the kind of work you are doing? Respondent's comments: ______________________	**27.** 1 ☐ Good wages 2 ☐ Liking the work	
28a. If, by some chance, you were to get enough money to live comfortably without working, do you think that you would work anyway?	**28a.** 1 ☐ Yes – *Ask 28b* 2 ☐ No – *Skip to 28c* 3 ☐ Undecided – *Skip to 28d*	
b. (*If "Yes" in 28a*) Why do you feel that you would work? ______________________		
c. (*If "No" in 28a*) Why do you feel that you would not work? ______________________		

D. ATTITUDES TOWARD WORK – Continued		**Do not use**
28d. *(If "Undecided" in 28a)* On what would it depend? ________________		
29a. Suppose someone IN THIS AREA offered you a job in the same line of work you're in now. How much would the new job have to pay for you to be willing to take it? *(If amount given per hour, record dollars and cents, otherwise, round to the nearest dollar.)* Respondent's comments: ________________	**29a.** $ ________ per ________ 1 ☐ I wouldn't take it at any conceivable pay 2 ☐ I would take a steady job at same or less pay	
b. What if this job were IN SOME OTHER PART OF THE COUNTRY – how much would it have to pay in order for you to be willing to take it? *(If amount given per hour, record dollars and cents; otherwise, round to nearest dollar.)* Respondent's comments: ________________	**b.** $ ________ per ________ 1 ☐ I wouldn't take it at any conceivable pay 2 ☐ I would take a steady job at same or less pay *(If "0" in 6d, skip to 40; otherwise, ask 30)*	
30. If for some reason you were permanently to lose your present job tomorrow, what would you do? *If "Other," specify here* ________________	**30.** 1 ☐ Retire – *Ask 31* 2 ☐ Take another job I know about – *Skip to 32a* 3 ☐ Go into business – *Skip to 33a* 4 ☐ Look for work – *Skip to 34a* 5 ☐ Other – *Skip to 39a*	
31. *(If "Retire" in 30)* Why do you think you would retire? ________________ *Skip to 39a*		
32a. *(If "Take another job" in 30)* For whom would you work? ________________		
b. What kind of business or industry would this be? ________________		
c. What kind of work do you think you would be doing? ________________		
d. In what city (or county) and State would this job be located?	**32d.** City or county State *Skip to 39a*	
33a. *(If "Go into business" in 30)* What kind of business? ________________		
b. In what city (or county) and State would it be located?	**33b.** City or county State *Skip to 39a*	
34a. *(If "Look for work" in 30)* What kind of work would you look for? ________________		
b. How would you go about looking for this kind of work? *If "Other," specify here* ________________	**34b.** 1 ☐ Check with public employment agency 2 ☐ Check with private employment agency 3 ☐ Check directly with employer 4 ☐ Place or answer ads 5 ☐ Check with friends or relatives 6 ☐ Other	

D. ATTITUDES TOWARD WORK – Continued

Do not use

34c. Are there any particular employers to whom you would apply?
(List employers and enter number in space provided.)

1. ____________________
2. ____________________
3. ____________________

34c. Number of employers listed ________
0 ☐ None – *Skip to 39a*

d. *(If entry in 34c)* Why do you mention these particular employers?

____

____________________ *Skip to 39a*

Labor Force Group B respondents only – *2 marked in Check Item H*

35a. If you were offered a job IN THIS AREA at the same pay as your last job, would you take it?

(If box 2 or 3 marked, specify here) ____________________

35a. 1 ☐ Yes, definitely
2 ☐ It depends. On what?
3 ☐ No – Why not?
} Specify

b. If you were offered a job IN ANOTHER PART OF THE COUNTRY at the same pay as your old job, would you take it?

(If box 2 or 3 marked, specity here) ____________________

b. 1 ☐ Yes, definitely
2 ☐ It depends. On what?
3 ☐ No – Why not?
} Specify

36a. If, by some chance, you were to get enough money to live comfortably without working, do you think that you would work anyway?

36a. 1 ☐ Yes – *Ask 36b*
2 ☐ No – *Skip to 36c*
3 ☐ Undecided – *Skip to 36d*

b. *(If "Yes" in 36a)* Why do you feel that you would work?

____________________ *Skip to 38*

c. *(If "No" in 36a)* Why do you feel that you would not work?

____________________ *Skip to 38*

d. *(If "Undecided" in 36a)* On what would it depend?

____________________ *Skip to 38*

All others – *3 marked in Check Item H*

37a. If you were offered a job by some employer IN THIS AREA, do you think you would take it?

(If box 2 or 3 marked, specify here) ____________________

____

37a. 1 ☐ Yes – *Ask 37b–c*
2 ☐ It depends. On what
3 ☐ No – Why not?
} Specify then skip to 38

b. What kind of work would it have to be?

____

c. What would the wage or salary have to be?

(If amount given per hour, record dollars and cents; otherwise, round to the nearest dollar.)

c. $ ________ per ________

38. What would you say is the more important thing about any job – good wages or liking the kind of work you are doing?

Respondent's comments ____________________

38.
1 ☐ Good wages
2 ☐ Liking the work
} *Enter respondent's comments and skip to 40a*

E. RETIREMENT PLANS

		Do not use
39a. *(If currently employed)* Is there a compulsory retirement plan where you work; that is, do you have to stop working at your present job at a certain age?	**39a.** 1 ☐ Yes – *Ask 39b* 2 ☐ No 3 ☐ Don't know } *Skip to 40a*	
b. At what age?	**b.** Age ______	
c. Would you work longer than that if you could?	**c.** 1 ☐ Yes – *Skip to 41a* 2 ☐ No – *Ask 39d*	
d. Do you expect to retire before this age?	**d.** 1 ☐ Yes – *Ask 40a* 2 ☐ No – *Skip to 41a*	
40a. At what age do you expect to stop working at a (your) regular job?	**40a.** 1 ☐ Age ______ *Ask 40b* 2 ☐ Don't plan to stop working 3 ☐ Already stopped } *Skip to 42a* 4 ☐ Don't know – *Skip to 41a*	
b. Why do you expect to stop working at a (your) regular job at this age? ______________________________		
41a. Some men, when they stop working at a regular job, take another job. Other men decide not to work any more at all. Which of these do you think you will do? *If "Other" specify here* ______________	**41a.** 1 ☐ Take another job – *Ask 41b* 2 ☐ Not work at all 3 ☐ Other } *Skip to 42a*	
b. *(If "Take another job" in 41a)* What kind of work will you try to get? ______________________________		
c. About how many hours a week do you think you will want to work?	**c.** Hours ______	
42a. Will you ever be eligible to receive Social Security or Railroad Retirement benefits?	**42a.** 1 ☐ Yes 2 ☐ No 3 ☐ Already receiving benefits 4 ☐ Don't know	
b. Will you be eligible for any other retirement benefits, such as personal plans, private employee, government employee, or military retirement plans?	**b.** 1 ☐ Personal plans 2 ☐ Private employee 3 ☐ Government employee 4 ☐ Military 5 ☐ Already receiving benefits 6 ☐ No 7 ☐ Don't know	

Notes

F. HEALTH

Do not use

CHECK ITEM I	1 ☐ Respondent is in Labor Force Group "A" or "B" (1 or 2 marked in Check Item H) – *Skip to 43b* 2 ☐ Other (3 marked in Check Item H) – *Ask 43*	

43. Does your health or physical condition –	**43.**
a. Keep you from working?	a. 1 ☐ Yes } *Skip to 44a* 2 ☐ No – *Ask 43b*
b. Limit the kind of work you can do?	b. 1 ☐ Yes } *Skip to 44a* 2 ☐ No – *Ask 43c*
c. Limit the amount of work you can do?	c. 1 ☐ Yes } *Skip to 44a* 2 ☐ No – *Skip to 45*

44a. *(If "Yes" in any of 43a–c)* In what way are you limited?

____

b. How long have you been limited in this way?	b. Years __________
45. Would you rate your health, compared with other men of about your age, as excellent, good, fair, or poor?	**45.** 1 ☐ Excellent 3 ☐ Fair 2 ☐ Good 4 ☐ Poor

☐ Respondent not married – *Skip to 48a*

46. Does your wife's health or physical condition –	**46.**
a. Keep her from working?	a. 1 ☐ Yes } *Skip to 47a* 2 ☐ No – *Ask 46b*
b. Limit the kind of work she can do?	b. 1 ☐ Yes } *Skip to 47a* 2 ☐ No – *Ask 46c*
c. Limit the amount of work she can do?	c. 1 ☐ Yes } *Skip to 47a* 2 ☐ No – *Ask 46d*
d. Limit the amount or kind of housework she can do?	d. 1 ☐ Yes } *Skip to 47a* 2 ☐ No – *Skip to 48a*

47a. *(If "Yes" in any of 46a–d)* In what way is she limited?

____

b. How long has she been limited in this way?	b. Years __________

Notes

G. EDUCATION AND TRAINING

48a. Now, I'd like to ask some questions about your education and specialized training. What is the highest grade (or year) of regular school you have ever attended?	**48a.** 00 ☐ Never attended school 1 Elem. [illegible] ☐ [illegible] ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 2 High 1 ☐ 2 ☐ 3 ☐ 4 ☐ 3 College 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6+ ☐
b. Did you finish this grade (year)?	b. 1 ☐ Yes 2 ☐ No
c. *(If H3 or H4)* Did you take a vocational or commercial curriculum in high school?	c. 1 ☐ Yes – *Ask 48d* 2 ☐ No – *Skip to 49a*

d. Primarily, what kind of training did you receive?

____

G. EDUCATION AND TRAINING – Continued		Do not use
49a. Aside from regular school, did you ever take a program in business college or technical institute such as draftsman or electronics training, etc.?	**49a.** 1 ☐ Yes – *Ask 49b* 2 ☐ No – *Skip to 50a*	
b. Did you finish or complete this program?	**b.** 1 ☐ Yes 2 ☐ No	
c. What type of training did you take? ______________________________		
d. How long did this training last?	**d.** Months __________	
e. Do you use this training on your present job (or last job if not employed)?	**e.** 1 ☐ Yes 2 ☐ No	
50a. Aside from regular school, did you ever take a full-time program lasting 6 weeks or more at a company training school?	**50a.** 1 ☐ Yes – *Ask 50b* 2 ☐ No – *Skip to 51a*	
b. Did you finish or complete this program?	**b.** 1 ☐ Yes 2 ☐ No	
c. Why type of training did you take? ______________________________		
d. How long did this training last?	**d.** Months __________	
e. Do you use this training on your present job (or last job if not employed)?	**e.** 1 ☐ Yes 2 ☐ No	
51a. Aside from regular school, did you ever take a vocational training program in the Armed Forces?	**51a.** 1 ☐ Yes – *Ask 51b* 2 ☐ No – *Skip to 52a*	
b. Did you finish or complete this program?	**b.** 1 ☐ Yes 2 ☐ No	
c. What type of training did you take? ______________________________		
d. How long did this training last?	**d.** Months __________	
e. Do you use this training on your present job (or last job if not employed)?	**e.** 1 ☐ Yes 2 ☐ No	
52a. Aside from regular school, did you ever take any other vocational, technical, or apprenticeship training (NOT counting on-the-job training given informally)?	**52a.** 1 ☐ Yes – *Ask 52b* 2 ☐ No – *Skip to 53a*	
b. Did you finish or complete this program?	**b.** 1 ☐ Yes 2 ☐ No	
c. Why type of training did you take? ______________________________		
d. How long did this training last?	**d.** Months __________	
e. Do you use this training on your present job (or last job if not employed)?	**e.** 1 ☐ Yes 2 ☐ No	
53a. Since you stopped going to school full time, have you taken any additional general courses such as English, math, or science?	**53a.** 1 ☐ Yes – *Ask 53b* 2 ☐ No – *Skip to 54*	
b. Did you finish or complete this course?	**b.** 1 ☐ Yes 2 ☐ No	
c. What kind of course did you take? ______________________________		
d. How long did this course last?	**d.** Months __________	
e. Do you use this training on your present job (or last job if not employed)?	**e.** 1 ☐ Yes 2 ☐ No	

H. ASSETS AND INCOME		Do not use
54. Is this house (apartment) owned or being bought by you (or your wife), or is it rented? *If "Other," specify here* ______	**54.** 1 ☐ Owned or being bought by respondent (or wife) – *Go to Check Item J* 2 ☐ Rented 3 ☐ No cash rent 4 ☐ Other (2–4) *Skip to 56a*	
CHECK ITEM J 1 ☐ Respondent lives ON farm – *Skip to 56a* 2 ☐ Respondent DOES NOT live on farm – *Ask 55a*		
55a. About how much do you think this property would sell for on today's market?	**55a.** $______ 0 ☐ None	
b. How much do you (or your wife) owe on this property for mortgages, back taxes, loans, etc.? *(Mortgages include deeds of trust, land contracts, contracts for deed, etc.)*	**b.** $______ 0 ☐ None	
56a. Do you (or your wife) rent, own, or have an investment in a farm?	**56a.** 1 ☐ Yes – *Ask 56b* 2 ☐ No – *Skip to 57a*	
b. What is the total market value of your farm operation? *(Include value of land, buildings, house, if you own them, and the equipment, livestock, stored crops, and other assets. Do not include crops held under Commodity Credit Loans.)*	**b.** $______	
c. Does that include the value of this house?	**c.** 1 ☐ Yes – *Skip to 56e* 2 ☐ No – *Ask 56d*	
d. How much do you think this house would sell for on today's market?	**d.** $______ 0 ☐ None	
e. How much do you owe on mortgages or other debts in connection with the farm itself, the equipment, livestock, or anything else? *(Do not count Commodity Credit Loans.)*	**e.** $______ 0 ☐ None	
57a. Do you (or your wife) own or have an investment in a business or professional practice?	**57a.** 1 ☐ Yes – *Ask 57b* 2 ☐ No – *Skip to 58a*	
b. What is the total market value of all assets in the business, including tools and equipment? In other words, how much do you think this business would sell for on today's market? *(Obtain value of respondent's and wife's share only.)*	**b.** $______ 0 ☐ None	
c. What is the total amount of debts or liabilities owed by the business? *(Include all liabilities, as carried on the books. Respondent's and wife's share only.)*	**c.** $______ 0 ☐ None	
58a. Do you (or your wife) own any other real estate – not counting the property on which you are living?	**58a.** 1 ☐ Yes – *Ask 58b* 2 ☐ No – *Skip to 59a*	
b. About how much do you think this property would sell for on today's market?	**b.** $______ 0 ☐ None	
c. How much is the unpaid amount of any mortgages on this property?	**c.** $______ 0 ☐ None	
d. How much other debt do you have on this property, such as back taxes or assessments, unpaid amounts of home improvement loans, or home repair bills, etc.?	**d.** $______ 0 ☐ None	
59a. Do you (or your wife) own an automobile?	**59a.** 1 ☐ Yes – How many? ______ *Ask 59b* 2 ☐ No – *Skip to 60*	
b. What is the make and model year of this automobile? *(If more than 1 car, ask about newest car.)*	**b.** Make ______ Model year ______	
c. Do you owe any money on this automobile?	**c.** 1 ☐ Yes – How much? $______ 2 ☐ No	

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H. ASSETS AND INCOME – Continued		Do not use
60. Do you (or other members of your family living here) have any money in savings or checking accounts, savings and loan companies, or credit unions?	**60.** 1 ☐ Yes – How much? $ ________ 2 ☐ No	
61. Do you (or any other members of your family living here) have any of the following? a. U.S. Savings Bonds?	**61.** a. 1 ☐ Yes – What is their face value? $ ________ 2 ☐ No	
b. Stocks, bonds, or shares in mutual funds?	b. 1 ☐ Yes – What is their market value? $ ________ 2 ☐ No	
c. Personal loans to others or mortgages you hold (money owed to you by other people)?	c. 1 ☐ Yes – How much? $ ________ 2 ☐ No	
62. Aside from any debts you have already mentioned, do you (and your wife) now owe any money to stores, doctors, hospitals, banks, or anyone else, excluding 30-day charge accounts?	**62.** 1 ☐ Yes – How much altogether? $ ________ 2 ☐ No	
63. Now I'd like to ask a few questions on your family's income in 1965. a. In 1965, how much did you receive from wages, salary, commissions, or tips from all jobs, before deductions for taxes or anything else?	**63.** a. $ ________ 0 ☐ None	
b. *(If respondent is married)* In 1965, how much did your wife receive from wages, salary, commissions, or tips from all jobs, before deductions for taxes or anything else?	b. $ ________ 0 ☐ None	
c. *(If other family members in household)* In 1965, how much did all other family members living here receive from wages, salary, commissions, or tips from all jobs, before deductions for taxes or anything else?	c. $ ________ 0 ☐ None	
64a. In 1965, how much did you receive from working on your own or in your own business, professional practice, or partnership? Gross income ________ less expenses ________ = Net	**64a.** Net income $ ________ 0 ☐ None 1 ☐ Loss	
b. In 1965, how much did all other family members living here receive from working on their own or in their own business, professional practice, or partnership? Gross income ________ less expenses ________ = Net	b. Net income $ ________ 0 ☐ None 1 ☐ Loss	
65. In 1965, how much did your family receive from operating a farm? Gross income ________ less expenses ________ = Net	**65.** Net income $ ________ 0 ☐ None 1 ☐ Loss	
CHECK ITEM K — *Make the following checks* 1 ☐ Respondent worked in 1965 (*number of weeks entered in 11a on page 5*). An amount should be entered in 63a, 64a, or 65. 2 ☐ Respondent did not work in 1965 ("*None*" *box marked in 11a on page 5*). The "None" box should be marked in 63a, 64a, and 65.		
66a. In 1965, did you receive any unemployment compensation?	**66a.** 1 ☐ Yes { How many weeks? ________ How much did you receive altogether? $ ________ 2 ☐ No	
b. *(If other family members in household)* In 1965, did any other family members living here receive any unemployment compensation?	b. 1 ☐ Yes – How much? ________ 2 ☐ No	
67. In addition, during 1965, did anyone in this family living here receive any rental income from roomers and boarders, an apartment in this house or another building, or other real estate? Gross income ________ less expenses ________ = Net	**67.** Net income $ ________ 0 ☐ No	

H. ASSETS AND INCOME – Continued

		Do not use
68. In 1965, did anyone receive interest or dividends on savings, stocks, bonds, or income from estates or trusts?	**68.** 1 ☐ Yes – How much? $________ 2 ☐ No	

69. In 1965, did anyone in this family living here receive income as a result of disability or illness such as *(read list)*:

(If "Yes" to any items in list, enter amount and indicate whether received by respondent or other family member.)

69.	Yes	No	Amount	Mark one column for each amount entered: Respondent	Mark one column for each amount entered: Other family member	Do not use
1. Social Security?	1 ☐	2 ☐	$			
2. Veteran's compensation or pension?	1 ☐	2 ☐	$			
3. Workmen's compensation?	1 ☐	2 ☐	$			
4. Aid to the Blind or the Permanently or Totally Disabled?	1 ☐	2 ☐	$			
5. Anything else? – *Specify type*	1 ☐	2 ☐	$			
________________			$			
________________			$			
			$			

		Do not use
70. In 1965, did anyone receive any (other) Social Security payments?	**70.** 1 ☐ Yes – How much? $________ Who? 2 ☐ Wife 3 ☐ Other 4 ☐ No	
71. In 1965, did anyone receive any (other) public assistance or welfare payments? *If "Yes"* – What type? ________________	**71.** 1 ☐ Yes – How much? $________ 2 ☐ No	
72a. In 1965, did you buy any food stamps under the Government's Food Stamp Plan?	**72a.** 1 ☐ Yes – *Ask 72b* 2 ☐ No – *Skip to 73*	
b. In how many months did you buy stamps?	**b.** Months________	
c. How much was your monthly bonus?	**c.** $________	
73. In 1965, did anyone receive any pensions from local, State, or Federal Government? *If "Yes"* – What type? ________________	**73.** 1 ☐ Yes – How much? $________ 2 ☐ No	
74. In 1965, did anyone receive any other type of income? (For example, royalties, annuities, contributions from family members living elsewhere, etc.) *If "Yes"* – What type? ________________	**74.** 1 ☐ Yes – How much? $________ 2 ☐ No	

Notes

I. FAMILY BACKGROUND		Do not use
75. Now I have some questions on your family background. Where were you born?	**75.** State County City or town OR ☐ Outside U.S. – *Specify country*	
76. For how long have you been living in *(Name of city or county of current residence)?*	**76.** 1 ☐ Less than 1 year 2 ☐ 1 year or more – *Specify*________ 3 ☐ All my life – *Skip to 78a*	
77. Where did you live before moving to *(Name of city or county of current residence)?*	**77.** State County City OR ☐ Outside U.S. – *Specify country*	
78a. Now I'd like to ask about your parents. Are your mother and father living?	**78a.** 1 ☐ BOTH parents alive 2 ☐ MOTHER alive, father dead 3 ☐ FATHER alive, mother dead 4 ☐ NEITHER parent alive	
b. What about your wife's parents – are her mother and father living?	**b.** 1 ☐ Respondent not married 2 ☐ BOTH parents alive 3 ☐ MOTHER alive, father dead 4 ☐ FATHER alive, mother dead 5 ☐ NEITHER parent alive	
79. Were your parents born in the U.S. or some other country?	**79.**	
a. Father	1 ☐ U.S. 2 ☐ Outside U.S. – *Specify country*	
b. Mother	1 ☐ U.S. 2 ☐ Outside U.S. – *Specify country* *If either parent born outside U.S., skip to 81a*	
80. In what country were your grandparents born?	**80.**	
a. Mother's mother	1 ☐ U.S. 2 ☐ Other – *Specify*	
b. Mother's father	1 ☐ U.S. 2 ☐ Other – *Specify*	
c. Father's mother	1 ☐ U.S. 2 ☐ Other – *Specify*	
d. Father's father	1 ☐ U.S. 2 ☐ Other – *Specify*	
81a. When you were 15 years old, were you living –	**81a.** 1 ☐ On a farm or ranch? 2 ☐ In the country, not on farm or ranch? 3 ☐ In a town or small city (under 25,000)? 4 ☐ In the suburb of a large city? 5 ☐ In a city of 25,000 – 100,000? 6 ☐ In a large city of 100,000 or more?	

I. FAMILY BACKGROUND – *Continued*

		Do not use
81b. With whom were you living when you were 15 years old? *(If 6 or 7 marked , specify or describe below.)* ____________________ ____________________	**81b.** 1 ☐ Father and mother 2 ☐ Father and step-mother 3 ☐ Mother and step-father 4 ☐ Father 5 ☐ Mother 6 ☐ Some other adult MALE relative – *Specify* 7 ☐ Some other arrangement – *Describe* 8 ☐ On my own – *Skip to 82a*	
c. What kind of work was your father doing when you were 15 years old? *(If respondent did not live with father at that age, ask about the work of the head of the household where he lived at age 15.)* ____________________ ____________________		
d. What was the highest grade of school completed by your father (or the head of the household where you lived at age 15)?	**d.** 00 ☐ Never attended school 1 Elem. 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 2 High 1 ☐ 2 ☐ 3 ☐ 4 ☐ 3 College 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6+ ☐ 99 ☐ Don't know	
82a. How many persons, not counting yourself (or your wife), are dependent upon you for at least one-half of their support?	**82a.** Number__________ 0 ☐ None – *Skip to 83a*	
b. Do any of these dependents live somewhere else other than here at home with you? *If "Yes" – What is their relationship to you?*__________ ____________________	**b.** 1 ☐ Yes – How many? __________ 2 ☐ No	
83a. Do you have any children who do not live at home with you?	**83a.** 1 ☐ Yes – *Ask 83b* x ☐ No – *Skip to 84*	
b. How many sons do you have living outside the household?	**b.** Number of sons __________	
c. How many daughters do you have living outside the household?	**c.** Number of daughters__________	
d. What is the highest grade of regular school these children have completed? *(Fill for oldest child first, then second oldest, etc.)*	**d.** 1 ☐ Son 2 ☐ Daughter Education 1 Elem. 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 2 High 1 ☐ 2 ☐ 3 ☐ 4 ☐ 3 College 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6+ ☐ 00 ☐ Never attended school 99 ☐ Don't know	
	Continue on next page *if necessary.*	

I. FAMILY BACKGROUND – Continued

Do not use

83. What is the highest grade of regular school these children have completed? – Continued

(List by oldest child first, then second oldest, etc.)

83d. 1 ☐ Son 2 ☐ Daughter

Education

1 Elem. 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐

2 High 1 ☐ 2 ☐ 3 ☐ 4 ☐

3 College 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6+ ☐

00 ☐ Never attended school

99 ☐ Don't know

1 ☐ Son 2 ☐ Daughter

Education

1 Elem. 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐

2 High 1 ☐ 2 ☐ 3 ☐ 4 ☐

3 College 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6+ ☐

00 ☐ Never attended school

99 ☐ Don't know

1 ☐ Son 2 ☐ Daughter

Education

1 Elem. 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐

2 High 1 ☐ 2 ☐ 3 ☐ 4 ☐

3 College 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6+ ☐

00 ☐ Never attended school

99 ☐ Don't know

1 ☐ Son 2 ☐ Daughter

Education

1 Elem. 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐

2 High 1 ☐ 2 ☐ 3 ☐ 4 ☐

3 College 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6+ ☐

00 ☐ Never attended school

99 ☐ Don't know

84. What is your Social Security number? ☐☐☐ – ☐☐ – ☐☐☐☐

Continue with questions on next page

Notes

Now I have a few questions about the education and work experience of the other family members living here.

			Persons 6–24 years old			Persons 25 years old and over		Persons 14 years old and over		
									If person worked at all in 1965	
Line number 85	NAME List below all persons living here who are related to respondent. Enter the line number from the Household Record Card in column 85. 86a	RELATIONSHIP TO RESPONDENT (Example: wife, son, daughter-in-law, brother, etc.) 86b	Is . . . attending or enrolled in school? Circle Y – Yes N – No 87	If "Yes" – What grade (year)? If "No" – What is the highest grade (year) . . . ever attended? 88	Did . . . finish this grade (year)? 89	What is the highest grade (year) of regular school . . . has ever attended? 90	Did . . . finish this grade (year)? 91	In 1965, how many weeks did . . . work either full or part time (not counting work around the house)? 92	In the weeks that . . . worked, how many hours did . . . usually work per week? 93	What kind of work was . . . doing in 1965? (If more than one, record the longest) 94
		Respondent								
			Y N		Y N		Y N			
			Y N		Y N		Y N			
			Y N		Y N		Y N			
			Y N		Y N		Y N			
			Y N		Y N		Y N			
			Y N		Y N		Y N			
			Y N		Y N		Y N			
			Y N		Y N		Y N			
			Y N		Y N		Y N			

95. *(Ask at the completion of the interview. If more than one respondent in the household, ask for each.)*

We would like to contact you again next year at this time to bring this information up to date. Would you please give me the name, address, and telephone number of two relatives or friends who will always know where you can be reached even if you move away?

Enter information below and transcribe to Household Record Card.

Name	Relationship to respondent	Address	Telephone number
1.			
2.			

Notes: